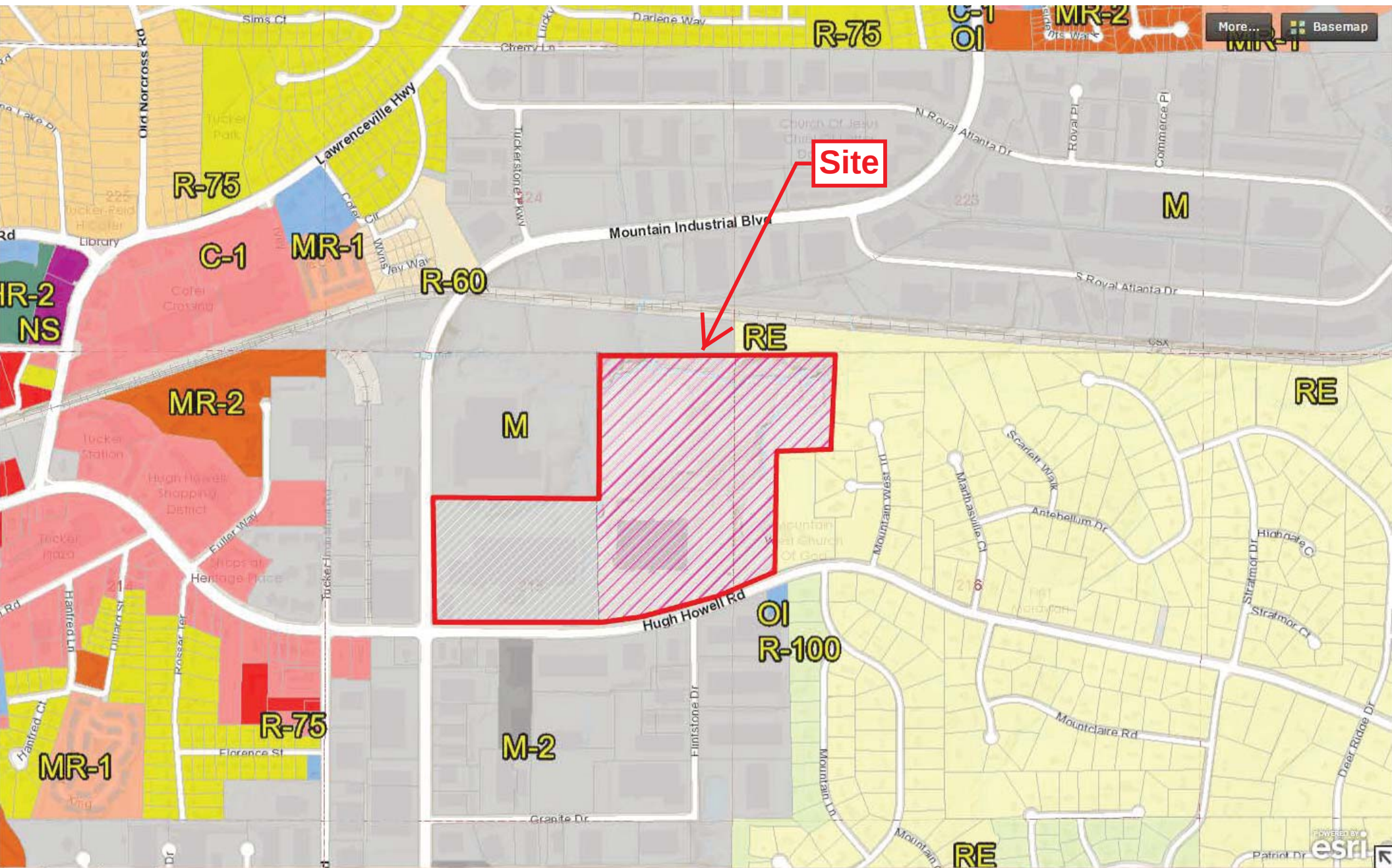


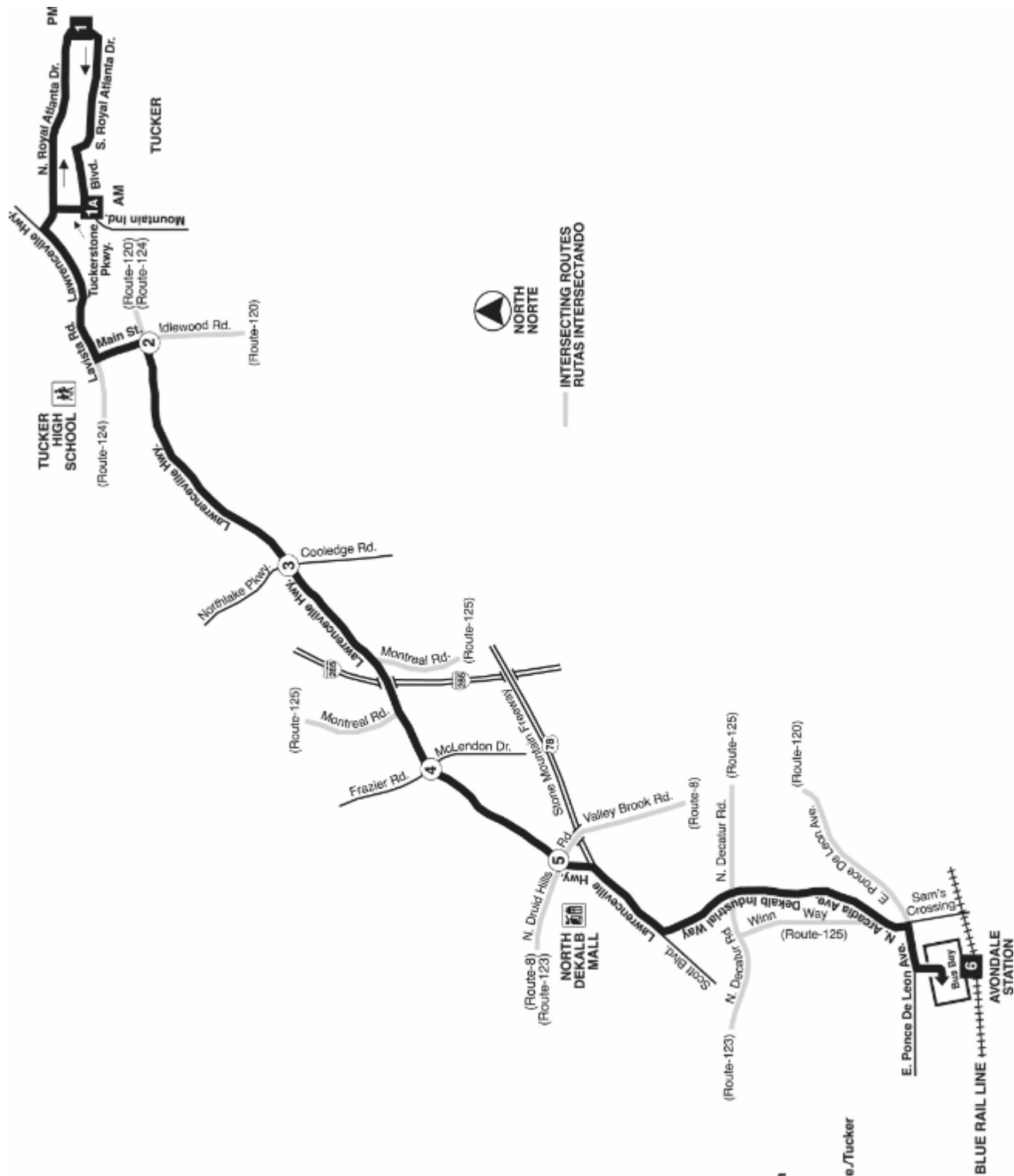


- Peachtree Industrial Blvd./Johnson Ferry Rd.
- Buford Highway
- Winters Chapel Rd.
- Pleasantdale Rd.
- Gwinnett County Transit
- GRTA Express



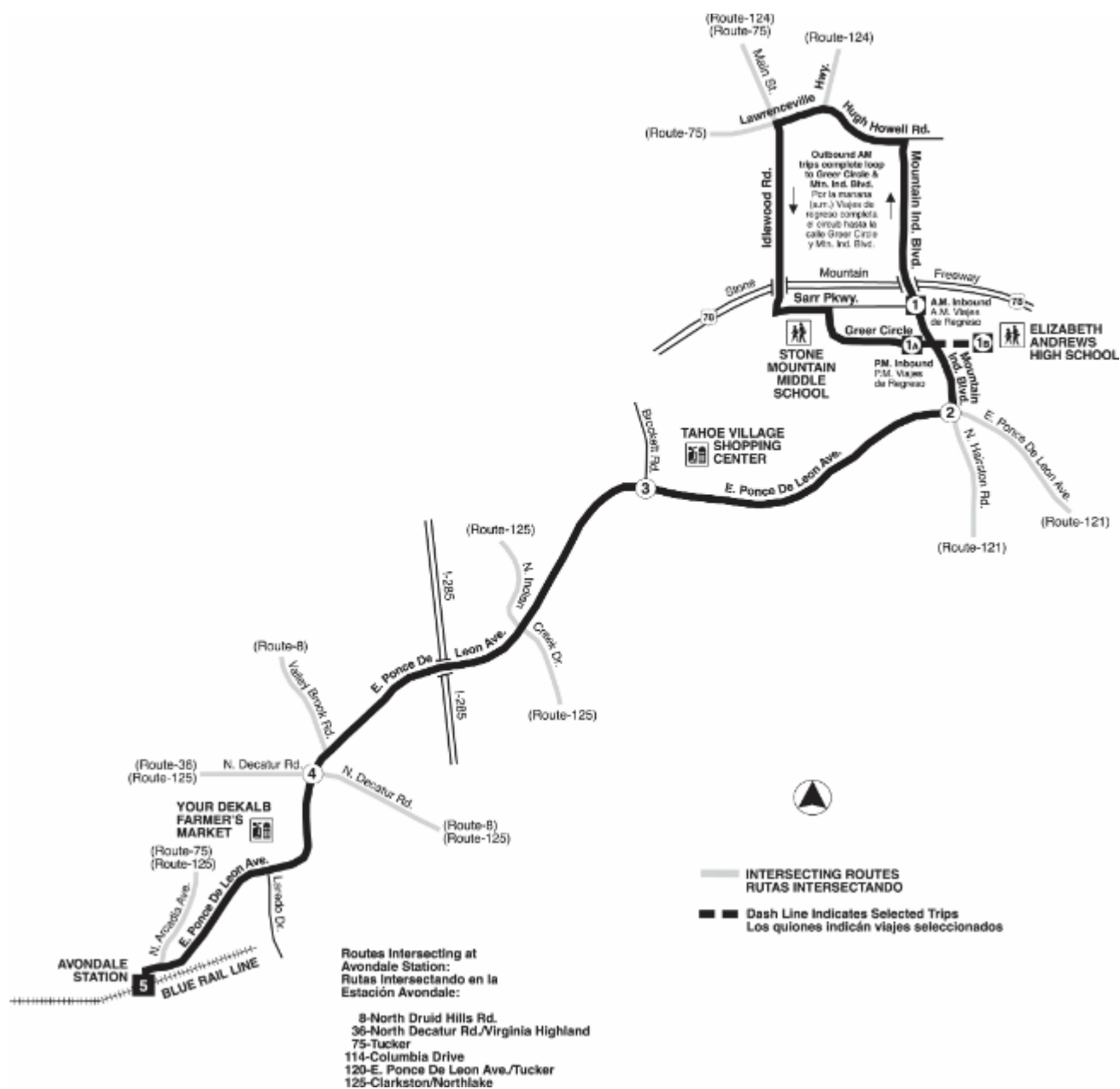
INTERSECTING ROUTES  
RUTAS INTERSECTANDO

TRIPS OPERATE VIA BUTTON GWINNETT DR.  
WEEKDAYS ONLY  
Viajes operan via Button Gwinnett Dr.  
solamente los días de entresemana.



Intersecting Routes at  
Avondale Station:  
Rutas Intersectando en la  
Estación Avondale:

75-Tucker  
114-Columbia Drive  
120-E. Ponce De Leon Ave./Tucker  
125-Clarkston/Northlake



# Tucker Township DRI

## Growth Analysis

| Year | Mountain Industrial  |          | Mountain Industrial     |          | Hugh Howell Road            |          | Hugh Howell Road            |          | US 29                  |          | US 78      |          | US 78       |          | Roadway        |  |
|------|----------------------|----------|-------------------------|----------|-----------------------------|----------|-----------------------------|----------|------------------------|----------|------------|----------|-------------|----------|----------------|--|
|      | US 78 to Hugh Howell |          | North of Hugh Howell Rd |          | West of Mountain Industrial |          | East of Mountain Industrial |          | West of Hugh Howell Rd |          | WB on Ramp |          | EB off Ramp |          | Count Location |  |
|      | 0893536              |          | 0893538                 |          | 0893274                     |          | 0893276                     |          | 0893025                |          | 089r912    |          | 089r311     |          | Count Number   |  |
|      | Principal Arterial   |          | Principal Arterial      |          | Minor Arterial              |          | Minor Arterial              |          | Minor Arterial         |          | Freeway    |          | Freeway     |          | Func Class     |  |
|      | AADT                 | % Growth | AADT                    | % Growth | AADT                        | % Growth | AADT                        | % Growth | AADT                   | % Growth | AADT       | % Growth | AADT        | % Growth |                |  |
|      | -1.89%               |          | 4.96%                   |          | -4.15%                      |          | -1.33%                      |          | 0.86%                  |          | -1.58%     |          | -1.44%      |          | 5-YR Growth    |  |
| 2014 | 34400                | -0.12%   | 29700                   | 23.60%   | 25100                       | 0.08%    | 11000                       | 7.74%    | 25700                  | 6.64%    | 13600      | -0.15%   | 12100       | 0.41%    |                |  |
| 2013 | 34440                | 0.29%    | 24030                   | 0.29%    | 25080                       | 7.04%    | 10210                       | 0.49%    | 24100                  | 0.46%    | 13620      | 10.28%   | 12050       | 1.69%    |                |  |
| 2012 | 34340                | -10.22%  | 23960                   | 1.70%    | 23430                       | -0.55%   | 10160                       | -13.68%  | 23990                  | -2.64%   | 12350      | 0.00%    | 11850       | 4.59%    |                |  |
| 2011 | 38250                | 0.95%    | 23560                   | 0.94%    | 23560                       | 6.51%    | 11770                       | -0.08%   | 24640                  | -0.12%   | 12350      | -8.11%   | 11330       | -6.83%   |                |  |
| 2010 | 37890                | 0.13%    | 23340                   | 0.13%    | 22120                       | -28.69%  | 11780                       | 0.17%    | 24670                  | 0.20%    | 13440      | -8.76%   | 12160       | -6.53%   |                |  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 12

Station ID: 12

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

| Start Time  | 11-May-16<br>Wed | EB         |           | Hour Totals |           |
|-------------|------------------|------------|-----------|-------------|-----------|
|             |                  | Morning    | Afternoon | Morning     | Afternoon |
| 12:00       |                  | 14         | 118       |             |           |
| 12:15       |                  | 24         | 137       |             |           |
| 12:30       |                  | 18         | 127       |             |           |
| 12:45       |                  | 8          | 142       | 64          | 524       |
| 01:00       |                  | 7          | 194       |             |           |
| 01:15       |                  | 12         | 137       |             |           |
| 01:30       |                  | 2          | 162       |             |           |
| 01:45       |                  | 5          | 138       | 26          | 631       |
| 02:00       |                  | 6          | 166       |             |           |
| 02:15       |                  | 13         | 164       |             |           |
| 02:30       |                  | 8          | 182       |             |           |
| 02:45       |                  | 7          | 182       | 34          | 694       |
| 03:00       |                  | 7          | 178       |             |           |
| 03:15       |                  | 8          | 195       |             |           |
| 03:30       |                  | 3          | 206       |             |           |
| 03:45       |                  | 9          | 217       | 27          | 796       |
| 04:00       |                  | 7          | 250       |             |           |
| 04:15       |                  | 4          | 261       |             |           |
| 04:30       |                  | 6          | 282       |             |           |
| 04:45       |                  | 9          | 278       | 26          | 1071      |
| 05:00       |                  | 6          | 283       |             |           |
| 05:15       |                  | 7          | 294       |             |           |
| 05:30       |                  | 10         | 284       |             |           |
| 05:45       |                  | 14         | 308       | 37          | 1169      |
| 06:00       |                  | 29         | 289       |             |           |
| 06:15       |                  | 26         | 291       |             |           |
| 06:30       |                  | 46         | 261       |             |           |
| 06:45       |                  | 53         | 252       | 154         | 1093      |
| 07:00       |                  | 56         | 237       |             |           |
| 07:15       |                  | 62         | 192       |             |           |
| 07:30       |                  | 84         | 173       |             |           |
| 07:45       |                  | 101        | 142       | 303         | 744       |
| 08:00       |                  | 92         | 155       |             |           |
| 08:15       |                  | 96         | 125       |             |           |
| 08:30       |                  | 96         | 124       |             |           |
| 08:45       |                  | 89         | 105       | 373         | 509       |
| 09:00       |                  | 97         | 103       |             |           |
| 09:15       |                  | 94         | 95        |             |           |
| 09:30       |                  | 83         | 68        |             |           |
| 09:45       |                  | 93         | 87        | 367         | 353       |
| 10:00       |                  | 87         | 70        |             |           |
| 10:15       |                  | 80         | 58        |             |           |
| 10:30       |                  | 87         | 40        |             |           |
| 10:45       |                  | 100        | 33        | 354         | 201       |
| 11:00       |                  | 91         | 37        |             |           |
| 11:15       |                  | 99         | 26        |             |           |
| 11:30       |                  | 115        | 20        |             |           |
| 11:45       |                  | 113        | 24        | 418         | 107       |
| Total       |                  | 2183       | 7892      |             |           |
| Percent     |                  | 21.7%      | 78.3%     |             |           |
| Grand Total |                  | 2183       | 7892      |             |           |
| Percent     |                  | 21.7%      | 78.3%     |             |           |
| ADT         |                  | ADT 10,075 |           | AADT 10,075 |           |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

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Site Code: 12.5

Station ID: 12.5

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

| Start Time  | 11-May-16<br>Wed | WB        |           | Hour Totals |           |
|-------------|------------------|-----------|-----------|-------------|-----------|
|             |                  | Morning   | Afternoon | Morning     | Afternoon |
| 12:00       |                  | 8         | 137       |             |           |
| 12:15       |                  | 8         | 129       |             |           |
| 12:30       |                  | 8         | 99        |             |           |
| 12:45       |                  | 12        | 136       | 36          | 501       |
| 01:00       |                  | 1         | 128       |             |           |
| 01:15       |                  | 2         | 124       |             |           |
| 01:30       |                  | 4         | 125       |             |           |
| 01:45       |                  | 6         | 108       | 13          | 485       |
| 02:00       |                  | 4         | 119       |             |           |
| 02:15       |                  | 7         | 123       |             |           |
| 02:30       |                  | 1         | 124       |             |           |
| 02:45       |                  | 4         | 90        | 16          | 456       |
| 03:00       |                  | 4         | 107       |             |           |
| 03:15       |                  | 8         | 129       |             |           |
| 03:30       |                  | 4         | 123       |             |           |
| 03:45       |                  | 10        | 110       | 26          | 469       |
| 04:00       |                  | 14        | 118       |             |           |
| 04:15       |                  | 9         | 99        |             |           |
| 04:30       |                  | 15        | 103       |             |           |
| 04:45       |                  | 19        | 120       | 57          | 440       |
| 05:00       |                  | 31        | 100       |             |           |
| 05:15       |                  | 31        | 111       |             |           |
| 05:30       |                  | 56        | 125       |             |           |
| 05:45       |                  | 87        | 101       | 205         | 437       |
| 06:00       |                  | 115       | 96        |             |           |
| 06:15       |                  | 197       | 94        |             |           |
| 06:30       |                  | 268       | 106       |             |           |
| 06:45       |                  | 310       | 90        | 890         | 386       |
| 07:00       |                  | 329       | 116       |             |           |
| 07:15       |                  | 313       | 85        |             |           |
| 07:30       |                  | 289       | 73        |             |           |
| 07:45       |                  | 269       | 82        | 1200        | 356       |
| 08:00       |                  | 265       | 96        |             |           |
| 08:15       |                  | 257       | 84        |             |           |
| 08:30       |                  | 238       | 58        |             |           |
| 08:45       |                  | 194       | 60        | 954         | 298       |
| 09:00       |                  | 183       | 52        |             |           |
| 09:15       |                  | 163       | 48        |             |           |
| 09:30       |                  | 149       | 48        |             |           |
| 09:45       |                  | 130       | 33        | 625         | 181       |
| 10:00       |                  | 135       | 31        |             |           |
| 10:15       |                  | 124       | 18        |             |           |
| 10:30       |                  | 143       | 28        |             |           |
| 10:45       |                  | 120       | 22        | 522         | 99        |
| 11:00       |                  | 122       | 17        |             |           |
| 11:15       |                  | 150       | 16        |             |           |
| 11:30       |                  | 132       | 11        |             |           |
| 11:45       |                  | 114       | 8         | 518         | 52        |
| Total       |                  | 5062      | 4160      |             |           |
| Percent     |                  | 54.9%     | 45.1%     |             |           |
| Grand Total |                  | 5062      | 4160      |             |           |
| Percent     |                  | 54.9%     | 45.1%     |             |           |
| ADT         |                  | ADT 9,222 |           | AADT 9,222  |           |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 12

Station ID: 12

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

EB

| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 05/11/16   | 0     | 13              | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 14    |
| 00:15      | 0     | 19              | 4           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 24    |
| 00:30      | 0     | 16              | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 18    |
| 00:45      | 0     | 8               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 01:00      | 0     | 56              | 7           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 64    |
| 01:15      | 0     | 6               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 01:30      | 0     | 11              | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 12    |
| 01:45      | 0     | 1               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2     |
| 02:00      | 0     | 5               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 5     |
| 02:15      | 0     | 23              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 26    |
| 02:30      | 0     | 5               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 6     |
| 02:45      | 0     | 11              | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 13    |
| 03:00      | 0     | 7               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 03:15      | 0     | 5               | 1           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 03:30      | 0     | 28              | 5           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 34    |
| 03:45      | 0     | 4               | 1           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 04:00      | 0     | 7               | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 04:15      | 0     | 3               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 3     |
| 04:30      | 0     | 6               | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 9     |
| 04:45      | 0     | 20              | 4           | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 27    |
| 05:00      | 1     | 6               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 05:15      | 0     | 3               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
| 05:30      | 0     | 2               | 3           | 0     | 0             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 6     |
| 05:45      | 0     | 7               | 1           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 9     |
| 06:00      | 1     | 18              | 5           | 1     | 0             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 26    |
| 06:15      | 0     | 5               | 0           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 6     |
| 06:30      | 0     | 5               | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 06:45      | 0     | 8               | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 10    |
| 07:00      | 0     | 11              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 14    |
| 07:15      | 0     | 29              | 7           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 37    |
| 07:30      | 1     | 24              | 4           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 29    |
| 07:45      | 2     | 17              | 7           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 26    |
| 08:00      | 2     | 35              | 7           | 1     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 46    |
| 08:15      | 3     | 39              | 9           | 1     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 53    |
| 08:30      | 8     | 115             | 27          | 2     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 154   |
| 08:45      | 2     | 41              | 9           | 0     | 3             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 56    |
| 09:00      | 1     | 44              | 10          | 0     | 4             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 61    |
| 09:15      | 1     | 68              | 11          | 0     | 0             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 83    |
| 09:30      | 1     | 78              | 18          | 0     | 2             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 101   |
| 09:45      | 5     | 231             | 48          | 0     | 9             | 1             | 0             | 7             | 0             | 0             | 0            | 0            | 0            | 301   |
| 10:00      | 0     | 71              | 15          | 0     | 4             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 91    |
| 10:15      | 0     | 74              | 16          | 0     | 4             | 1             | 0             | 0             | 0             | 1             | 0            | 0            | 0            | 96    |
| 10:30      | 2     | 70              | 17          | 0     | 4             | 0             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 96    |
| 10:45      | 2     | 64              | 13          | 4     | 1             | 2             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 88    |
| 11:00      | 4     | 279             | 61          | 4     | 13            | 4             | 0             | 4             | 1             | 1             | 0            | 0            | 0            | 371   |
| 11:15      | 0     | 69              | 22          | 0     | 2             | 0             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 97    |
| 11:30      | 0     | 59              | 28          | 1     | 2             | 2             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 94    |
| 11:45      | 4     | 57              | 21          | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 83    |
| 12:00      | 1     | 67              | 19          | 0     | 5             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 93    |
| 12:15      | 5     | 252             | 90          | 1     | 10            | 2             | 0             | 7             | 0             | 0             | 0            | 0            | 0            | 367   |
| 12:30      | 0     | 60              | 17          | 0     | 5             | 0             | 0             | 4             | 0             | 0             | 1            | 0            | 0            | 87    |
| 12:45      | 1     | 59              | 14          | 2     | 3             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 80    |
| 13:00      | 1     | 66              | 13          | 0     | 4             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 86    |
| 13:15      | 3     | 74              | 18          | 2     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 100   |
| 13:30      | 5     | 259             | 62          | 4     | 14            | 1             | 0             | 7             | 0             | 0             | 1            | 0            | 0            | 353   |
| 13:45      | 0     | 69              | 18          | 0     | 1             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 90    |
| 14:00      | 0     | 70              | 26          | 1     | 0             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 98    |
| 14:15      | 2     | 80              | 28          | 2     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 114   |
| 14:30      | 1     | 90              | 17          | 0     | 2             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 113   |
| 14:45      | 3     | 309             | 89          | 3     | 5             | 1             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 415   |
| Total      | 31    | 1619            | 408         | 17    | 57            | 9             | 0             | 31            | 1             | 1             | 1            | 0            | 0            | 2175  |
| Percent    | 1.4%  | 74.4%           | 18.8%       | 0.8%  | 2.6%          | 0.4%          | 0.0%          | 1.4%          | 0.0%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 2

Site Code: 12

Station ID: 12

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

EB

| Start Time  | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|-------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 12 PM       | 1     | 90              | 19          | 0     | 6             | 0             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 118   |
| 12:15       | 3     | 98              | 30          | 1     | 2             | 0             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 137   |
| 12:30       | 1     | 98              | 20          | 0     | 3             | 0             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 126   |
| 12:45       | 1     | 106             | 23          | 3     | 6             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 141   |
|             | 6     | 392             | 92          | 4     | 17            | 0             | 0             | 9             | 2             | 0             | 0            | 0            | 0            | 522   |
| 13:00       | 4     | 139             | 40          | 2     | 7             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 193   |
| 13:15       | 1     | 107             | 24          | 0     | 1             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 136   |
| 13:30       | 3     | 111             | 36          | 4     | 4             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 161   |
| 13:45       | 2     | 112             | 15          | 2     | 5             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 138   |
|             | 10    | 469             | 115         | 8     | 17            | 1             | 0             | 8             | 0             | 0             | 0            | 0            | 0            | 628   |
| 14:00       | 0     | 125             | 30          | 1     | 5             | 0             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 166   |
| 14:15       | 0     | 121             | 33          | 2     | 7             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 164   |
| 14:30       | 0     | 143             | 27          | 3     | 4             | 0             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 181   |
| 14:45       | 1     | 134             | 35          | 3     | 6             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 181   |
|             | 1     | 523             | 125         | 9     | 22            | 0             | 0             | 12            | 0             | 0             | 0            | 0            | 0            | 692   |
| 15:00       | 1     | 135             | 32          | 1     | 3             | 2             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 177   |
| 15:15       | 1     | 155             | 24          | 1     | 11            | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 194   |
| 15:30       | 4     | 167             | 19          | 0     | 11            | 1             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 205   |
| 15:45       | 3     | 166             | 28          | 0     | 14            | 0             | 0             | 4             | 0             | 0             | 1            | 0            | 0            | 216   |
|             | 9     | 623             | 103         | 2     | 39            | 3             | 0             | 11            | 1             | 0             | 1            | 0            | 0            | 792   |
| 16:00       | 2     | 199             | 36          | 1     | 7             | 1             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 249   |
| 16:15       | 2     | 216             | 31          | 2     | 4             | 0             | 0             | 3             | 0             | 0             | 2            | 0            | 0            | 260   |
| 16:30       | 3     | 223             | 39          | 2     | 9             | 0             | 1             | 3             | 0             | 0             | 1            | 0            | 0            | 281   |
| 16:45       | 1     | 233             | 31          | 0     | 6             | 1             | 0             | 4             | 0             | 0             | 1            | 0            | 0            | 277   |
|             | 8     | 871             | 137         | 5     | 26            | 2             | 1             | 13            | 0             | 0             | 4            | 0            | 0            | 1067  |
| 17:00       | 1     | 221             | 38          | 3     | 13            | 1             | 0             | 4             | 0             | 1             | 0            | 0            | 0            | 282   |
| 17:15       | 0     | 232             | 45          | 0     | 13            | 1             | 0             | 1             | 0             | 1             | 0            | 0            | 0            | 293   |
| 17:30       | 1     | 247             | 23          | 1     | 8             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 283   |
| 17:45       | 1     | 252             | 37          | 3     | 12            | 0             | 0             | 2             | 0             | 0             | 1            | 0            | 0            | 308   |
|             | 3     | 952             | 143         | 7     | 46            | 2             | 0             | 10            | 0             | 2             | 1            | 0            | 0            | 1166  |
| 18:00       | 0     | 236             | 35          | 1     | 12            | 0             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 288   |
| 18:15       | 0     | 229             | 41          | 2     | 14            | 1             | 0             | 1             | 0             | 3             | 0            | 0            | 0            | 291   |
| 18:30       | 0     | 222             | 27          | 1     | 5             | 0             | 0             | 6             | 0             | 0             | 0            | 0            | 0            | 261   |
| 18:45       | 0     | 213             | 27          | 0     | 7             | 1             | 0             | 1             | 0             | 0             | 2            | 0            | 0            | 251   |
|             | 0     | 900             | 130         | 4     | 38            | 2             | 0             | 12            | 0             | 3             | 2            | 0            | 0            | 1091  |
| 19:00       | 0     | 196             | 31          | 0     | 5             | 1             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 236   |
| 19:15       | 0     | 163             | 19          | 0     | 6             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 191   |
| 19:30       | 0     | 156             | 11          | 0     | 5             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 173   |
| 19:45       | 0     | 126             | 10          | 0     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 141   |
|             | 0     | 641             | 71          | 0     | 20            | 1             | 0             | 8             | 0             | 0             | 0            | 0            | 0            | 741   |
| 20:00       | 0     | 132             | 14          | 0     | 6             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 155   |
| 20:15       | 0     | 104             | 13          | 1     | 6             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 124   |
| 20:30       | 0     | 98              | 15          | 1     | 9             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 124   |
| 20:45       | 1     | 91              | 5           | 1     | 5             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 104   |
|             | 1     | 425             | 47          | 3     | 26            | 0             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 507   |
| 21:00       | 0     | 85              | 10          | 1     | 5             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 103   |
| 21:15       | 0     | 82              | 11          | 0     | 1             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 95    |
| 21:30       | 0     | 58              | 4           | 0     | 5             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 68    |
| 21:45       | 0     | 67              | 13          | 0     | 5             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 87    |
|             | 0     | 292             | 38          | 1     | 16            | 0             | 0             | 6             | 0             | 0             | 0            | 0            | 0            | 353   |
| 22:00       | 0     | 54              | 13          | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 70    |
| 22:15       | 0     | 50              | 4           | 0     | 3             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 58    |
| 22:30       | 0     | 29              | 7           | 1     | 1             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 39    |
| 22:45       | 0     | 27              | 3           | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 33    |
|             | 0     | 160             | 27          | 1     | 10            | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 200   |
| 23:00       | 0     | 31              | 4           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 37    |
| 23:15       | 0     | 22              | 3           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 26    |
| 23:30       | 0     | 19              | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 20    |
| 23:45       | 0     | 23              | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 24    |
|             | 0     | 95              | 8           | 0     | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 107   |
| Total       | 38    | 6343            | 1036        | 44    | 281           | 11            | 1             | 96            | 3             | 5             | 8            | 0            | 0            | 7866  |
| Percent     | 0.5%  | 80.6%           | 13.2%       | 0.6%  | 3.6%          | 0.1%          | 0.0%          | 1.2%          | 0.0%          | 0.1%          | 0.1%         | 0.0%         | 0.0%         |       |
| Grand Total | 69    | 7962            | 1444        | 61    | 338           | 20            | 1             | 127           | 4             | 6             | 9            | 0            | 0            | 10041 |
| Percent     | 0.7%  | 79.3%           | 14.4%       | 0.6%  | 3.4%          | 0.2%          | 0.0%          | 1.3%          | 0.0%          | 0.1%          | 0.1%         | 0.0%         | 0.0%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 12.5

Station ID: 12.5

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

WB

| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 05/11/16   | 0     | 8               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 00:15      | 0     | 4               | 3           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 00:30      | 0     | 8               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 00:45      | 0     | 10              | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 12    |
| 01:00      | 0     | 30              | 5           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 36    |
| 01:15      | 0     | 1               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1     |
| 01:30      | 0     | 2               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 2     |
| 01:45      | 0     | 4               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
| 02:00      | 0     | 5               | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 6     |
| 02:15      | 0     | 12              | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 13    |
| 02:30      | 0     | 3               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
| 02:45      | 0     | 7               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 7     |
| 03:00      | 0     | 1               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 1     |
| 03:15      | 0     | 4               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
| 03:30      | 0     | 3               | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 4     |
| 03:45      | 1     | 9               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 10    |
| 04:00      | 1     | 22              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 26    |
| 04:15      | 0     | 12              | 1           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 14    |
| 04:30      | 0     | 9               | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 9     |
| 04:45      | 0     | 11              | 4           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15    |
| 05:00      | 0     | 14              | 5           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 19    |
| 05:15      | 0     | 46              | 10          | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 57    |
| 05:30      | 1     | 27              | 2           | 0     | 0             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 31    |
| 05:45      | 1     | 27              | 2           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 31    |
| 06:00      | 0     | 46              | 9           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 56    |
| 06:15      | 1     | 74              | 11          | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 87    |
| 06:30      | 3     | 174             | 24          | 0     | 3             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 205   |
| 06:45      | 1     | 89              | 20          | 0     | 2             | 1             | 0             | 1             | 0             | 0             | 1            | 0            | 0            | 115   |
| 07:00      | 3     | 166             | 22          | 0     | 3             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 197   |
| 07:15      | 3     | 243             | 19          | 1     | 1             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 268   |
| 07:30      | 0     | 273             | 29          | 2     | 3             | 2             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 310   |
| 07:45      | 7     | 771             | 90          | 3     | 9             | 3             | 0             | 6             | 0             | 0             | 1            | 0            | 0            | 890   |
| 08:00      | 1     | 280             | 39          | 2     | 6             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 329   |
| 08:15      | 2     | 281             | 27          | 0     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 313   |
| 08:30      | 2     | 247             | 25          | 3     | 6             | 1             | 0             | 3             | 0             | 0             | 1            | 0            | 0            | 288   |
| 08:45      | 1     | 217             | 42          | 0     | 4             | 2             | 0             | 2             | 0             | 0             | 1            | 0            | 0            | 269   |
| 09:00      | 6     | 1025            | 133         | 5     | 18            | 3             | 0             | 7             | 0             | 0             | 2            | 0            | 0            | 1199  |
| 09:15      | 1     | 231             | 27          | 0     | 3             | 1             | 0             | 1             | 0             | 1             | 0            | 0            | 0            | 265   |
| 09:30      | 1     | 215             | 21          | 3     | 3             | 2             | 0             | 7             | 2             | 1             | 1            | 0            | 0            | 256   |
| 09:45      | 0     | 206             | 26          | 0     | 1             | 1             | 0             | 2             | 1             | 0             | 0            | 1            | 0            | 238   |
| 10:00      | 1     | 166             | 21          | 1     | 0             | 2             | 0             | 1             | 1             | 0             | 0            | 1            | 0            | 194   |
| 10:15      | 3     | 818             | 95          | 4     | 7             | 6             | 0             | 11            | 4             | 2             | 1            | 2            | 0            | 953   |
| 10:30      | 0     | 151             | 25          | 2     | 1             | 3             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 183   |
| 10:45      | 2     | 141             | 17          | 0     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 163   |
| 11:00      | 1     | 120             | 23          | 0     | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 148   |
| 11:15      | 1     | 104             | 19          | 0     | 2             | 3             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 130   |
| 11:30      | 4     | 516             | 84          | 2     | 9             | 6             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 624   |
| 11:45      | 1     | 107             | 17          | 0     | 7             | 1             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 135   |
| 12:00      | 0     | 100             | 16          | 0     | 7             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 124   |
| 12:15      | 0     | 123             | 18          | 0     | 0             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 143   |
| 12:30      | 2     | 97              | 13          | 1     | 5             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 120   |
| 12:45      | 3     | 427             | 64          | 1     | 19            | 3             | 0             | 4             | 1             | 0             | 0            | 0            | 0            | 522   |
| 13:00      | 2     | 99              | 16          | 0     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 122   |
| 13:15      | 0     | 123             | 19          | 1     | 6             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 150   |
| 13:30      | 0     | 106             | 22          | 0     | 3             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 132   |
| 13:45      | 0     | 90              | 17          | 0     | 3             | 1             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 114   |
| 14:00      | 2     | 418             | 74          | 1     | 16            | 2             | 0             | 4             | 1             | 0             | 0            | 0            | 0            | 518   |
| Total      | 29    | 4274            | 583         | 16    | 84            | 24            | 0             | 35            | 6             | 2             | 4            | 2            | 0            | 5059  |
| Percent    | 0.6%  | 84.5%           | 11.5%       | 0.3%  | 1.7%          | 0.5%          | 0.0%          | 0.7%          | 0.1%          | 0.0%          | 0.1%         | 0.0%         | 0.0%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 2

Site Code: 12.5

Station ID: 12.5

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

WB

| Start Time  | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|-------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 12 PM       | 0     | 116             | 13          | 0     | 6             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 137   |
| 12:15       | 0     | 102             | 21          | 1     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 129   |
| 12:30       | 0     | 85              | 11          | 1     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 99    |
| 12:45       | 0     | 111             | 16          | 0     | 4             | 1             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 136   |
| 13:00       | 0     | 414             | 61          | 2     | 16            | 1             | 0             | 7             | 0             | 0             | 0            | 0            | 0            | 501   |
| 13:15       | 0     | 109             | 17          | 1     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 128   |
| 13:30       | 0     | 101             | 23          | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 124   |
| 13:45       | 0     | 100             | 18          | 0     | 5             | 1             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 125   |
| 14:00       | 1     | 86              | 15          | 0     | 5             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 108   |
| 14:15       | 1     | 396             | 73          | 1     | 11            | 1             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 485   |
| 14:30       | 0     | 98              | 18          | 1     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 119   |
| 14:45       | 0     | 101             | 15          | 3     | 2             | 0             | 0             | 1             | 0             | 0             | 1            | 0            | 0            | 123   |
| 15:00       | 3     | 94              | 19          | 1     | 4             | 0             | 0             | 1             | 1             | 0             | 0            | 0            | 1            | 124   |
| 15:15       | 1     | 73              | 9           | 0     | 6             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 90    |
| 15:30       | 4     | 366             | 61          | 5     | 14            | 0             | 0             | 3             | 1             | 0             | 1            | 0            | 1            | 456   |
| 15:45       | 0     | 81              | 21          | 0     | 5             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 107   |
| 16:00       | 0     | 108             | 13          | 1     | 5             | 0             | 0             | 0             | 1             | 1             | 0            | 0            | 0            | 129   |
| 16:15       | 1     | 100             | 14          | 1     | 4             | 1             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 123   |
| 16:30       | 0     | 86              | 21          | 0     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 110   |
| 16:45       | 1     | 375             | 69          | 2     | 16            | 1             | 0             | 3             | 1             | 1             | 0            | 0            | 0            | 469   |
| 17:00       | 0     | 104             | 10          | 1     | 2             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 118   |
| 17:15       | 2     | 82              | 11          | 1     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 99    |
| 17:30       | 0     | 86              | 11          | 1     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 103   |
| 17:45       | 0     | 93              | 17          | 3     | 3             | 0             | 0             | 3             | 1             | 0             | 0            | 0            | 0            | 120   |
| 18:00       | 2     | 365             | 49          | 6     | 11            | 1             | 0             | 5             | 1             | 0             | 0            | 0            | 0            | 440   |
| 18:15       | 2     | 86              | 9           | 1     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 100   |
| 18:30       | 0     | 90              | 19          | 1     | 0             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 111   |
| 18:45       | 1     | 100             | 22          | 0     | 1             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 125   |
| 19:00       | 0     | 85              | 12          | 0     | 1             | 0             | 0             | 2             | 0             | 0             | 0            | 1            | 0            | 101   |
| 19:15       | 3     | 361             | 62          | 2     | 4             | 2             | 0             | 2             | 0             | 0             | 0            | 1            | 0            | 437   |
| 19:30       | 2     | 84              | 10          | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 96    |
| 19:45       | 2     | 82              | 9           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 94    |
| 20:00       | 2     | 83              | 17          | 1     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 106   |
| 20:15       | 1     | 79              | 8           | 1     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 90    |
| 20:30       | 7     | 328             | 44          | 2     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 386   |
| 20:45       | 0     | 105             | 11          | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 116   |
| 21:00       | 0     | 74              | 10          | 0     | 0             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 85    |
| 21:15       | 0     | 64              | 9           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 73    |
| 21:30       | 1     | 69              | 9           | 0     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 82    |
| 21:45       | 1     | 312             | 39          | 0     | 2             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 356   |
| 22:00       | 0     | 89              | 6           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 96    |
| 22:15       | 0     | 78              | 5           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 84    |
| 22:30       | 0     | 51              | 7           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 58    |
| 22:45       | 2     | 46              | 8           | 0     | 4             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 60    |
| 23:00       | 2     | 264             | 26          | 0     | 6             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 298   |
| 23:15       | 0     | 48              | 4           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 52    |
| 23:30       | 0     | 42              | 6           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 48    |
| 23:45       | 0     | 44              | 4           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 48    |
| 24:00       | 0     | 30              | 1           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 33    |
| 24:15       | 0     | 164             | 15          | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 181   |
| 24:30       | 0     | 28              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 31    |
| 24:45       | 0     | 15              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 18    |
| 25:00       | 2     | 24              | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 28    |
| 25:15       | 0     | 20              | 1           | 0     | 0             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 22    |
| 25:30       | 2     | 87              | 9           | 0     | 0             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 99    |
| 25:45       | 0     | 15              | 1           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 17    |
| 26:00       | 1     | 15              | 0           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 16    |
| 26:15       | 0     | 9               | 2           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 11    |
| 26:30       | 0     | 7               | 0           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 8     |
| 26:45       | 1     | 46              | 3           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 52    |
| Total       | 24    | 3478            | 511         | 20    | 88            | 6             | 0             | 25            | 4             | 1             | 1            | 1            | 1            | 4160  |
| Percent     | 0.6%  | 83.6%           | 12.3%       | 0.5%  | 2.1%          | 0.1%          | 0.0%          | 0.6%          | 0.1%          | 0.0%          | 0.0%         | 0.0%         | 0.0%         |       |
| Grand Total | 53    | 7752            | 1094        | 36    | 172           | 30            | 0             | 60            | 10            | 3             | 5            | 3            | 1            | 9219  |
| Percent     | 0.6%  | 84.1%           | 11.9%       | 0.4%  | 1.9%          | 0.3%          | 0.0%          | 0.7%          | 0.1%          | 0.0%          | 0.1%         | 0.0%         | 0.0%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 12

Station ID: 12

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

EB

| Start Time | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 05/11/16   | 0       | 0        | 0        | 0        | 1        | 4        | 2        | 7        | 0        | 0        | 0        | 0        | 0        | 0         | 14    |
| 00:15      | 1       | 1        | 0        | 0        | 0        | 7        | 7        | 4        | 4        | 0        | 0        | 0        | 0        | 0         | 24    |
| 00:30      | 0       | 0        | 0        | 0        | 1        | 4        | 8        | 5        | 0        | 0        | 0        | 0        | 0        | 0         | 18    |
| 00:45      | 0       | 0        | 0        | 0        | 0        | 2        | 4        | 0        | 1        | 0        | 1        | 0        | 0        | 0         | 8     |
| 01:00      | 1       | 1        | 0        | 0        | 2        | 17       | 21       | 16       | 5        | 0        | 1        | 0        | 0        | 0         | 64    |
| 01:15      | 0       | 0        | 0        | 0        | 1        | 1        | 5        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 7     |
| 01:30      | 0       | 0        | 0        | 0        | 0        | 6        | 2        | 3        | 1        | 0        | 0        | 0        | 0        | 0         | 12    |
| 01:45      | 0       | 0        | 0        | 0        | 2        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 2     |
| 02:00      | 0       | 0        | 0        | 1        | 0        | 1        | 2        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 5     |
| 02:15      | 0       | 0        | 0        | 1        | 1        | 10       | 9        | 4        | 1        | 0        | 0        | 0        | 0        | 0         | 26    |
| 02:30      | 0       | 0        | 0        | 0        | 0        | 3        | 2        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 6     |
| 02:45      | 0       | 0        | 0        | 1        | 0        | 4        | 6        | 1        | 0        | 1        | 0        | 0        | 0        | 0         | 13    |
| 03:00      | 0       | 0        | 0        | 0        | 0        | 4        | 3        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 8     |
| 03:15      | 0       | 0        | 0        | 3        | 0        | 2        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 7     |
| 03:30      | 0       | 0        | 0        | 4        | 0        | 13       | 13       | 3        | 0        | 1        | 0        | 0        | 0        | 0         | 34    |
| 03:45      | 0       | 1        | 0        | 0        | 0        | 2        | 4        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 7     |
| 04:00      | 0       | 0        | 0        | 0        | 0        | 3        | 4        | 0        | 1        | 0        | 0        | 0        | 0        | 0         | 8     |
| 04:15      | 0       | 0        | 1        | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 3     |
| 04:30      | 0       | 0        | 0        | 0        | 0        | 1        | 3        | 1        | 4        | 0        | 0        | 0        | 0        | 0         | 9     |
| 04:45      | 0       | 1        | 1        | 0        | 0        | 6        | 12       | 2        | 5        | 0        | 0        | 0        | 0        | 0         | 27    |
| 05:00      | 1       | 1        | 0        | 1        | 0        | 4        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 7     |
| 05:15      | 0       | 0        | 0        | 0        | 0        | 1        | 2        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 4     |
| 05:30      | 0       | 0        | 0        | 0        | 0        | 3        | 2        | 0        | 1        | 0        | 0        | 0        | 0        | 0         | 6     |
| 05:45      | 0       | 0        | 2        | 0        | 0        | 1        | 3        | 3        | 0        | 0        | 0        | 0        | 0        | 0         | 9     |
| 06:00      | 1       | 1        | 2        | 1        | 0        | 9        | 7        | 4        | 1        | 0        | 0        | 0        | 0        | 0         | 26    |
| 06:15      | 1       | 0        | 1        | 0        | 0        | 2        | 1        | 0        | 1        | 0        | 0        | 0        | 0        | 0         | 6     |
| 06:30      | 0       | 1        | 0        | 1        | 0        | 0        | 1        | 4        | 0        | 0        | 0        | 0        | 0        | 0         | 7     |
| 06:45      | 0       | 0        | 1        | 0        | 2        | 5        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 10    |
| 07:00      | 0       | 0        | 0        | 0        | 1        | 4        | 2        | 6        | 0        | 0        | 1        | 0        | 0        | 0         | 14    |
| 07:15      | 1       | 1        | 2        | 1        | 3        | 11       | 6        | 10       | 1        | 0        | 1        | 0        | 0        | 0         | 37    |
| 07:30      | 5       | 0        | 1        | 2        | 2        | 9        | 8        | 1        | 0        | 1        | 0        | 0        | 0        | 0         | 29    |
| 07:45      | 2       | 1        | 1        | 2        | 4        | 6        | 8        | 0        | 1        | 1        | 0        | 0        | 0        | 0         | 26    |
| 08:00      | 2       | 0        | 2        | 0        | 4        | 14       | 13       | 5        | 2        | 1        | 3        | 0        | 0        | 0         | 46    |
| 08:15      | 6       | 1        | 1        | 0        | 6        | 11       | 12       | 7        | 4        | 5        | 0        | 0        | 0        | 0         | 53    |
| 08:30      | 15      | 2        | 5        | 4        | 16       | 40       | 41       | 13       | 7        | 8        | 3        | 0        | 0        | 0         | 154   |
| 08:45      | 1       | 1        | 4        | 3        | 1        | 12       | 20       | 5        | 5        | 4        | 0        | 0        | 0        | 0         | 56    |
| 09:00      | 5       | 0        | 3        | 2        | 4        | 12       | 21       | 8        | 3        | 3        | 1        | 0        | 0        | 0         | 62    |
| 09:15      | 9       | 1        | 0        | 6        | 8        | 21       | 22       | 11       | 2        | 1        | 2        | 1        | 0        | 0         | 84    |
| 09:30      | 10      | 5        | 2        | 2        | 4        | 29       | 29       | 17       | 1        | 1        | 1        | 0        | 0        | 0         | 101   |
| 09:45      | 25      | 7        | 9        | 13       | 17       | 74       | 92       | 41       | 11       | 9        | 4        | 1        | 0        | 0         | 303   |
| 10:00      | 12      | 3        | 3        | 3        | 4        | 17       | 29       | 10       | 3        | 3        | 4        | 1        | 0        | 0         | 92    |
| 10:15      | 7       | 2        | 2        | 1        | 10       | 33       | 25       | 13       | 2        | 1        | 0        | 0        | 0        | 0         | 96    |
| 10:30      | 4       | 1        | 1        | 4        | 10       | 18       | 19       | 18       | 14       | 5        | 2        | 0        | 0        | 0         | 96    |
| 10:45      | 5       | 3        | 7        | 2        | 6        | 22       | 23       | 12       | 4        | 4        | 0        | 1        | 0        | 0         | 89    |
| 11:00      | 28      | 9        | 13       | 10       | 30       | 90       | 96       | 53       | 23       | 13       | 6        | 2        | 0        | 0         | 373   |
| 11:15      | 1       | 0        | 2        | 1        | 10       | 28       | 30       | 21       | 4        | 0        | 0        | 0        | 0        | 0         | 97    |
| 11:30      | 5       | 3        | 1        | 3        | 7        | 27       | 23       | 12       | 10       | 2        | 0        | 1        | 0        | 0         | 94    |
| 11:45      | 5       | 0        | 3        | 2        | 7        | 22       | 30       | 12       | 1        | 0        | 1        | 0        | 0        | 0         | 83    |
| 12:00      | 8       | 3        | 2        | 4        | 6        | 22       | 19       | 9        | 13       | 6        | 1        | 0        | 0        | 0         | 93    |
| 12:15      | 19      | 6        | 8        | 10       | 30       | 99       | 102      | 54       | 28       | 8        | 2        | 1        | 0        | 0         | 367   |
| 12:30      | 7       | 2        | 2        | 0        | 5        | 23       | 35       | 10       | 3        | 0        | 0        | 0        | 0        | 0         | 87    |
| 12:45      | 5       | 1        | 2        | 4        | 2        | 15       | 20       | 22       | 5        | 3        | 1        | 0        | 0        | 0         | 80    |
| 13:00      | 3       | 1        | 1        | 0        | 6        | 23       | 27       | 15       | 9        | 1        | 1        | 0        | 0        | 0         | 87    |
| 13:15      | 6       | 2        | 1        | 1        | 4        | 30       | 31       | 12       | 7        | 6        | 0        | 0        | 0        | 0         | 100   |
| 13:30      | 21      | 6        | 6        | 5        | 17       | 91       | 113      | 59       | 24       | 10       | 2        | 0        | 0        | 0         | 354   |
| 13:45      | 3       | 1        | 1        | 1        | 6        | 19       | 35       | 13       | 6        | 4        | 2        | 0        | 0        | 0         | 91    |
| 14:00      | 3       | 5        | 0        | 2        | 6        | 26       | 32       | 14       | 8        | 2        | 1        | 0        | 0        | 0         | 99    |
| 14:15      | 9       | 2        | 4        | 3        | 5        | 25       | 26       | 23       | 12       | 5        | 1        | 0        | 0        | 0         | 115   |
| 14:30      | 1       | 0        | 4        | 1        | 10       | 30       | 42       | 18       | 4        | 2        | 0        | 1        | 0        | 0         | 113   |
| 14:45      | 16      | 8        | 9        | 7        | 27       | 100      | 135      | 68       | 30       | 13       | 4        | 1        | 0        | 0         | 418   |
| Total      | 127     | 42       | 55       | 56       | 143      | 560      | 647      | 327      | 136      | 62       | 23       | 5        | 0        | 0         | 2183  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
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Page 2

Site Code: 12

Station ID: 12

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

EB

| Start Time  | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |
|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 12 PM       | 2       | 2        | 1        | 2        | 9        | 25       | 34       | 21       | 16       | 3        | 2        | 1        | 0        | 0         | 118   |
| 12:15       | 5       | 5        | 3        | 1        | 15       | 31       | 46       | 23       | 4        | 3        | 1        | 0        | 0        | 0         | 137   |
| 12:30       | 7       | 3        | 2        | 2        | 7        | 33       | 38       | 26       | 5        | 2        | 2        | 0        | 0        | 0         | 127   |
| 12:45       | 7       | 2        | 6        | 4        | 9        | 33       | 45       | 26       | 6        | 3        | 0        | 1        | 0        | 0         | 142   |
|             | 21      | 12       | 12       | 9        | 40       | 122      | 163      | 96       | 31       | 11       | 5        | 2        | 0        | 0         | 524   |
| 13:00       | 9       | 3        | 4        | 10       | 8        | 53       | 65       | 39       | 2        | 0        | 1        | 0        | 0        | 0         | 194   |
| 13:15       | 3       | 0        | 1        | 0        | 8        | 44       | 58       | 16       | 5        | 2        | 0        | 0        | 0        | 0         | 137   |
| 13:30       | 8       | 5        | 2        | 3        | 22       | 41       | 51       | 25       | 5        | 0        | 0        | 0        | 0        | 0         | 162   |
| 13:45       | 5       | 3        | 4        | 4        | 4        | 36       | 43       | 31       | 4        | 3        | 1        | 0        | 0        | 0         | 138   |
|             | 25      | 11       | 11       | 17       | 42       | 174      | 217      | 111      | 16       | 5        | 2        | 0        | 0        | 0         | 631   |
| 14:00       | 7       | 1        | 4        | 3        | 12       | 41       | 56       | 35       | 6        | 0        | 0        | 1        | 0        | 0         | 166   |
| 14:15       | 10      | 2        | 2        | 6        | 17       | 41       | 60       | 18       | 4        | 3        | 0        | 1        | 0        | 0         | 164   |
| 14:30       | 9       | 1        | 1        | 11       | 13       | 60       | 65       | 18       | 4        | 0        | 0        | 0        | 0        | 0         | 182   |
| 14:45       | 8       | 2        | 2        | 8        | 16       | 51       | 58       | 31       | 4        | 1        | 0        | 1        | 0        | 0         | 182   |
|             | 34      | 6        | 9        | 28       | 58       | 193      | 239      | 102      | 18       | 4        | 0        | 3        | 0        | 0         | 694   |
| 15:00       | 10      | 2        | 6        | 6        | 18       | 36       | 68       | 24       | 7        | 1        | 0        | 0        | 0        | 0         | 178   |
| 15:15       | 9       | 4        | 2        | 3        | 11       | 37       | 91       | 32       | 6        | 0        | 0        | 0        | 0        | 0         | 195   |
| 15:30       | 10      | 3        | 7        | 3        | 18       | 49       | 78       | 28       | 4        | 5        | 1        | 0        | 0        | 0         | 206   |
| 15:45       | 8       | 3        | 4        | 0        | 9        | 53       | 91       | 37       | 11       | 1        | 0        | 0        | 0        | 0         | 217   |
|             | 37      | 12       | 19       | 12       | 56       | 175      | 328      | 121      | 28       | 7        | 1        | 0        | 0        | 0         | 796   |
| 16:00       | 13      | 3        | 3        | 2        | 17       | 58       | 95       | 46       | 10       | 3        | 0        | 0        | 0        | 0         | 250   |
| 16:15       | 13      | 1        | 7        | 1        | 35       | 90       | 74       | 34       | 6        | 0        | 0        | 0        | 0        | 0         | 261   |
| 16:30       | 12      | 1        | 5        | 3        | 13       | 84       | 111      | 43       | 6        | 3        | 1        | 0        | 0        | 0         | 282   |
| 16:45       | 15      | 2        | 9        | 1        | 9        | 77       | 102      | 50       | 10       | 2        | 1        | 0        | 0        | 0         | 278   |
|             | 53      | 7        | 24       | 7        | 74       | 309      | 382      | 173      | 32       | 8        | 2        | 0        | 0        | 0         | 1071  |
| 17:00       | 11      | 3        | 4        | 4        | 22       | 73       | 101      | 49       | 11       | 4        | 0        | 1        | 0        | 0         | 283   |
| 17:15       | 15      | 6        | 8        | 1        | 14       | 83       | 105      | 47       | 8        | 3        | 3        | 1        | 0        | 0         | 294   |
| 17:30       | 15      | 5        | 4        | 2        | 25       | 97       | 90       | 33       | 13       | 0        | 0        | 0        | 0        | 0         | 284   |
| 17:45       | 17      | 5        | 5        | 10       | 38       | 92       | 107      | 28       | 6        | 0        | 0        | 0        | 0        | 0         | 308   |
|             | 58      | 19       | 21       | 17       | 99       | 345      | 403      | 157      | 38       | 7        | 3        | 2        | 0        | 0         | 1169  |
| 18:00       | 2       | 0        | 2        | 2        | 13       | 51       | 157      | 46       | 14       | 2        | 0        | 0        | 0        | 0         | 289   |
| 18:15       | 18      | 9        | 2        | 4        | 14       | 86       | 112      | 30       | 15       | 1        | 0        | 0        | 0        | 0         | 291   |
| 18:30       | 17      | 1        | 5        | 3        | 18       | 59       | 92       | 58       | 7        | 1        | 0        | 0        | 0        | 0         | 261   |
| 18:45       | 8       | 3        | 3        | 3        | 13       | 45       | 121      | 40       | 14       | 1        | 1        | 0        | 0        | 0         | 252   |
|             | 45      | 13       | 12       | 12       | 58       | 241      | 482      | 174      | 50       | 5        | 1        | 0        | 0        | 0         | 1093  |
| 19:00       | 12      | 2        | 5        | 2        | 7        | 58       | 90       | 43       | 14       | 3        | 0        | 0        | 1        | 0         | 237   |
| 19:15       | 3       | 4        | 5        | 2        | 5        | 54       | 80       | 27       | 9        | 3        | 0        | 0        | 0        | 0         | 192   |
| 19:30       | 2       | 2        | 2        | 0        | 2        | 23       | 76       | 52       | 11       | 1        | 2        | 0        | 0        | 0         | 173   |
| 19:45       | 7       | 2        | 9        | 0        | 2        | 19       | 57       | 37       | 7        | 1        | 1        | 0        | 0        | 0         | 142   |
|             | 24      | 10       | 21       | 4        | 16       | 154      | 303      | 159      | 41       | 8        | 3        | 0        | 1        | 0         | 744   |
| 20:00       | 0       | 0        | 2        | 0        | 13       | 55       | 54       | 26       | 4        | 1        | 0        | 0        | 0        | 0         | 155   |
| 20:15       | 6       | 4        | 1        | 2        | 4        | 36       | 49       | 14       | 7        | 2        | 0        | 0        | 0        | 0         | 125   |
| 20:30       | 6       | 0        | 0        | 0        | 3        | 26       | 53       | 30       | 5        | 1        | 0        | 0        | 0        | 0         | 124   |
| 20:45       | 4       | 4        | 4        | 2        | 8        | 31       | 34       | 15       | 3        | 0        | 0        | 0        | 0        | 0         | 105   |
|             | 16      | 8        | 7        | 4        | 28       | 148      | 190      | 85       | 19       | 4        | 0        | 0        | 0        | 0         | 509   |
| 21:00       | 2       | 1        | 2        | 1        | 3        | 25       | 41       | 22       | 4        | 0        | 1        | 1        | 0        | 0         | 103   |
| 21:15       | 2       | 1        | 2        | 2        | 4        | 22       | 38       | 16       | 4        | 1        | 2        | 1        | 0        | 0         | 95    |
| 21:30       | 2       | 1        | 1        | 1        | 4        | 20       | 23       | 10       | 3        | 2        | 0        | 1        | 0        | 0         | 68    |
| 21:45       | 4       | 3        | 2        | 0        | 3        | 26       | 26       | 19       | 3        | 0        | 1        | 0        | 0        | 0         | 87    |
|             | 10      | 6        | 7        | 4        | 14       | 93       | 128      | 67       | 14       | 3        | 4        | 3        | 0        | 0         | 353   |
| 22:00       | 1       | 1        | 1        | 0        | 5        | 16       | 35       | 9        | 2        | 0        | 0        | 0        | 0        | 0         | 70    |
| 22:15       | 0       | 2        | 0        | 1        | 4        | 9        | 20       | 13       | 5        | 2        | 2        | 0        | 0        | 0         | 58    |
| 22:30       | 3       | 0        | 3        | 0        | 4        | 14       | 6        | 4        | 5        | 0        | 1        | 0        | 0        | 0         | 40    |
| 22:45       | 0       | 0        | 0        | 0        | 0        | 6        | 15       | 5        | 3        | 4        | 0        | 0        | 0        | 0         | 33    |
|             | 4       | 3        | 4        | 1        | 13       | 45       | 76       | 31       | 15       | 6        | 3        | 0        | 0        | 0         | 201   |
| 23:00       | 0       | 0        | 1        | 0        | 2        | 10       | 15       | 5        | 3        | 1        | 0        | 0        | 0        | 0         | 37    |
| 23:15       | 2       | 0        | 1        | 0        | 2        | 8        | 9        | 4        | 0        | 0        | 0        | 0        | 0        | 0         | 26    |
| 23:30       | 1       | 0        | 1        | 0        | 2        | 7        | 5        | 1        | 2        | 0        | 0        | 1        | 0        | 0         | 20    |
| 23:45       | 0       | 1        | 0        | 0        | 1        | 8        | 7        | 6        | 1        | 0        | 0        | 0        | 0        | 0         | 24    |
|             | 3       | 1        | 3        | 0        | 7        | 33       | 36       | 16       | 6        | 1        | 0        | 1        | 0        | 0         | 107   |
| Total       | 330     | 108      | 150      | 115      | 505      | 2032     | 2947     | 1292     | 308      | 69       | 24       | 11       | 1        | 0         | 7892  |
| Grand Total | 457     | 150      | 205      | 171      | 648      | 2592     | 3594     | 1619     | 444      | 131      | 47       | 16       | 1        | 0         | 10075 |

15th Percentile : 34 MPH  
50th Percentile : 41 MPH  
85th Percentile : 47 MPH  
95th Percentile : 51 MPH

Stats Mean Speed(Average) : 40 MPH  
10 MPH Pace Speed : 36-45 MPH  
Number in Pace : 6186

|                                |       |
|--------------------------------|-------|
| Percent in Pace :              | 61.4% |
| Number of Vehicles > 55 MPH :  | 195   |
| Percent of Vehicles > 55 MPH : | 1.9%  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 12.5

Station ID: 12.5

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

| WB         |         |          |          |          |          |          |          |          |          |          |          |          |          |           |       |  |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|--|
| Start Time | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |  |
| 05/11/16   | 0       | 0        | 0        | 0        | 0        | 0        | 1        | 5        | 2        | 0        | 0        | 0        | 0        | 0         | 8     |  |
| 00:15      | 0       | 0        | 0        | 0        | 0        | 1        | 3        | 3        | 0        | 1        | 0        | 0        | 0        | 0         | 8     |  |
| 00:30      | 0       | 0        | 0        | 0        | 1        | 0        | 4        | 2        | 1        | 0        | 0        | 0        | 0        | 0         | 8     |  |
| 00:45      | 1       | 0        | 0        | 0        | 0        | 1        | 8        | 2        | 0        | 0        | 0        | 0        | 0        | 0         | 12    |  |
| 01:00      | 1       | 0        | 0        | 0        | 1        | 2        | 16       | 12       | 3        | 1        | 0        | 0        | 0        | 0         | 36    |  |
| 01:15      | 0       | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1     |  |
| 01:30      | 0       | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 2     |  |
| 01:45      | 0       | 0        | 0        | 0        | 0        | 0        | 1        | 3        | 0        | 0        | 0        | 0        | 0        | 0         | 4     |  |
| 02:00      | 0       | 0        | 0        | 0        | 0        | 0        | 5        | 1        | 0        | 0        | 0        | 0        | 0        | 0         | 6     |  |
| 02:15      | 0       | 0        | 0        | 0        | 0        | 0        | 8        | 5        | 0        | 0        | 0        | 0        | 0        | 0         | 13    |  |
| 02:30      | 0       | 0        | 0        | 0        | 0        | 0        | 3        | 0        | 1        | 0        | 0        | 0        | 0        | 0         | 4     |  |
| 02:45      | 0       | 0        | 0        | 0        | 0        | 1        | 1        | 5        | 0        | 0        | 0        | 0        | 0        | 0         | 7     |  |
| 03:00      | 0       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1     |  |
| 03:15      | 0       | 0        | 0        | 0        | 0        | 1        | 2        | 0        | 1        | 0        | 0        | 0        | 0        | 0         | 4     |  |
| 03:30      | 0       | 0        | 0        | 0        | 0        | 0        | 3        | 6        | 5        | 2        | 0        | 0        | 0        | 0         | 16    |  |
| 03:45      | 0       | 0        | 0        | 0        | 1        | 0        | 1        | 1        | 1        | 0        | 0        | 0        | 0        | 0         | 4     |  |
| 04:00      | 0       | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 1        | 0        | 0        | 0        | 0        | 0         | 4     |  |
| 04:15      | 0       | 0        | 0        | 0        | 0        | 1        | 3        | 3        | 0        | 2        | 0        | 0        | 0        | 0         | 9     |  |
| 04:30      | 0       | 0        | 0        | 0        | 0        | 1        | 7        | 5        | 1        | 1        | 0        | 0        | 0        | 0         | 15    |  |
| 04:45      | 1       | 0        | 0        | 0        | 0        | 0        | 12       | 5        | 0        | 1        | 0        | 0        | 0        | 0         | 19    |  |
| 05:00      | 1       | 0        | 0        | 0        | 0        | 2        | 26       | 22       | 2        | 4        | 0        | 0        | 0        | 0         | 57    |  |
| 05:15      | 1       | 0        | 1        | 0        | 2        | 2        | 12       | 12       | 1        | 0        | 0        | 0        | 0        | 0         | 31    |  |
| 05:30      | 0       | 1        | 0        | 0        | 1        | 1        | 12       | 10       | 5        | 1        | 0        | 0        | 0        | 0         | 31    |  |
| 05:45      | 0       | 0        | 0        | 1        | 0        | 3        | 17       | 27       | 5        | 2        | 1        | 0        | 0        | 0         | 56    |  |
| 06:00      | 0       | 1        | 1        | 0        | 1        | 4        | 32       | 33       | 13       | 1        | 0        | 1        | 0        | 0         | 87    |  |
| 06:15      | 1       | 2        | 2        | 1        | 4        | 10       | 73       | 82       | 24       | 4        | 1        | 1        | 0        | 0         | 205   |  |
| 06:30      | 1       | 0        | 0        | 0        | 0        | 8        | 55       | 47       | 4        | 0        | 0        | 0        | 0        | 0         | 115   |  |
| 06:45      | 5       | 0        | 0        | 0        | 1        | 12       | 69       | 84       | 22       | 4        | 0        | 0        | 0        | 0         | 197   |  |
| 07:00      | 3       | 0        | 0        | 0        | 3        | 19       | 122      | 92       | 29       | 0        | 0        | 0        | 0        | 0         | 268   |  |
| 07:15      | 5       | 0        | 0        | 1        | 11       | 50       | 141      | 90       | 10       | 2        | 0        | 0        | 0        | 0         | 310   |  |
| 07:30      | 14      | 0        | 0        | 1        | 15       | 89       | 387      | 313      | 65       | 6        | 0        | 0        | 0        | 0         | 890   |  |
| 07:45      | 5       | 2        | 3        | 11       | 42       | 81       | 128      | 49       | 8        | 0        | 0        | 0        | 0        | 0         | 329   |  |
| 08:00      | 9       | 1        | 5        | 15       | 15       | 65       | 148      | 44       | 10       | 1        | 0        | 0        | 0        | 0         | 313   |  |
| 08:15      | 8       | 0        | 3        | 6        | 18       | 75       | 118      | 54       | 7        | 0        | 0        | 0        | 0        | 0         | 289   |  |
| 08:30      | 5       | 0        | 4        | 5        | 15       | 45       | 115      | 70       | 9        | 1        | 0        | 0        | 0        | 0         | 269   |  |
| 08:45      | 27      | 3        | 15       | 37       | 90       | 266      | 509      | 217      | 34       | 2        | 0        | 0        | 0        | 0         | 1200  |  |
| 09:00      | 4       | 1        | 1        | 0        | 1        | 34       | 141      | 70       | 11       | 2        | 0        | 0        | 0        | 0         | 265   |  |
| 09:15      | 4       | 0        | 0        | 1        | 4        | 38       | 118      | 78       | 14       | 0        | 0        | 0        | 0        | 0         | 257   |  |
| 09:30      | 5       | 1        | 0        | 0        | 3        | 29       | 97       | 89       | 12       | 1        | 0        | 1        | 0        | 0         | 238   |  |
| 09:45      | 3       | 0        | 0        | 0        | 0        | 16       | 95       | 71       | 6        | 3        | 0        | 0        | 0        | 0         | 194   |  |
| 10:00      | 16      | 2        | 1        | 1        | 8        | 117      | 451      | 308      | 43       | 6        | 0        | 1        | 0        | 0         | 954   |  |
| 10:15      | 5       | 1        | 1        | 0        | 1        | 12       | 81       | 65       | 17       | 0        | 0        | 0        | 0        | 0         | 183   |  |
| 10:30      | 2       | 0        | 0        | 0        | 2        | 11       | 65       | 66       | 14       | 3        | 0        | 0        | 0        | 0         | 163   |  |
| 10:45      | 4       | 0        | 1        | 0        | 0        | 13       | 71       | 50       | 6        | 4        | 0        | 0        | 0        | 0         | 149   |  |
| 11:00      | 2       | 0        | 0        | 0        | 1        | 20       | 62       | 32       | 12       | 1        | 0        | 0        | 0        | 0         | 130   |  |
| 11:15      | 13      | 1        | 2        | 0        | 4        | 56       | 279      | 213      | 49       | 8        | 0        | 0        | 0        | 0         | 625   |  |
| 11:30      | 2       | 0        | 0        | 0        | 3        | 25       | 57       | 32       | 13       | 3        | 0        | 0        | 0        | 0         | 135   |  |
| 11:45      | 0       | 1        | 0        | 1        | 3        | 15       | 48       | 48       | 8        | 0        | 0        | 0        | 0        | 0         | 124   |  |
| 12:00      | 2       | 0        | 0        | 1        | 0        | 20       | 54       | 55       | 8        | 3        | 0        | 0        | 0        | 0         | 143   |  |
| 12:15      | 2       | 1        | 0        | 0        | 5        | 16       | 47       | 34       | 13       | 1        | 1        | 0        | 0        | 0         | 120   |  |
| 12:30      | 6       | 2        | 0        | 2        | 11       | 76       | 206      | 169      | 42       | 7        | 1        | 0        | 0        | 0         | 522   |  |
| 12:45      | 3       | 0        | 0        | 0        | 4        | 13       | 63       | 29       | 10       | 0        | 0        | 0        | 0        | 0         | 122   |  |
| 13:00      | 2       | 0        | 0        | 0        | 4        | 23       | 71       | 39       | 10       | 1        | 0        | 0        | 0        | 0         | 150   |  |
| 13:15      | 1       | 0        | 0        | 0        | 0        | 14       | 59       | 45       | 10       | 2        | 0        | 1        | 0        | 0         | 132   |  |
| 13:30      | 1       | 0        | 0        | 2        | 0        | 20       | 60       | 23       | 7        | 1        | 0        | 0        | 0        | 0         | 114   |  |
| 13:45      | 7       | 0        | 0        | 2        | 8        | 70       | 253      | 136      | 37       | 4        | 0        | 1        | 0        | 0         | 518   |  |
| Total      | 89      | 10       | 20       | 44       | 142      | 692      | 2222     | 1488     | 306      | 43       | 2        | 4        | 0        | 0         | 5062  |  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 2

Site Code: 12.5

Station ID: 12.5

HUGH HOWELL ROAD EAST OF MT IND. BLVD

Latitude: 0' 0.0000 Undefined

| WB          | Start Time | 15  | 1620 | 2125 | 2630 | 3135 | 3640 | 4145 | 4650 | 5155 | 5660 | 6165 | 6670 | 7175 | 76999 | Total |
|-------------|------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
|             | 12 PM      | 3   | 0    | 0    | 0    | 3    | 23   | 57   | 42   | 7    | 2    | 0    | 0    | 0    | 0     | 137   |
|             | 12:15      | 1   | 1    | 0    | 0    | 5    | 21   | 62   | 37   | 2    | 0    | 0    | 0    | 0    | 0     | 129   |
|             | 12:30      | 1   | 1    | 0    | 0    | 2    | 13   | 34   | 38   | 8    | 2    | 0    | 0    | 0    | 0     | 99    |
|             | 12:45      | 2   | 0    | 0    | 0    | 2    | 14   | 69   | 34   | 13   | 2    | 0    | 0    | 0    | 0     | 136   |
|             |            | 7   | 2    | 0    | 0    | 12   | 71   | 222  | 151  | 30   | 6    | 0    | 0    | 0    | 0     | 501   |
|             | 13:00      | 4   | 0    | 0    | 0    | 1    | 11   | 54   | 51   | 4    | 3    | 0    | 0    | 0    | 0     | 128   |
|             | 13:15      | 1   | 0    | 0    | 0    | 0    | 16   | 58   | 44   | 3    | 2    | 0    | 0    | 0    | 0     | 124   |
|             | 13:30      | 1   | 1    | 1    | 0    | 0    | 11   | 54   | 47   | 8    | 2    | 0    | 0    | 0    | 0     | 125   |
|             | 13:45      | 0   | 0    | 0    | 0    | 3    | 17   | 44   | 33   | 10   | 1    | 0    | 0    | 0    | 0     | 108   |
|             |            | 6   | 1    | 1    | 0    | 4    | 55   | 210  | 175  | 25   | 8    | 0    | 0    | 0    | 0     | 485   |
|             | 14:00      | 2   | 0    | 0    | 0    | 2    | 24   | 53   | 31   | 6    | 0    | 1    | 0    | 0    | 0     | 119   |
|             | 14:15      | 2   | 0    | 0    | 0    | 0    | 21   | 71   | 24   | 5    | 0    | 0    | 0    | 0    | 0     | 123   |
|             | 14:30      | 1   | 1    | 0    | 0    | 6    | 20   | 53   | 38   | 4    | 1    | 0    | 0    | 0    | 0     | 124   |
|             | 14:45      | 1   | 0    | 1    | 0    | 4    | 16   | 33   | 30   | 3    | 1    | 1    | 0    | 0    | 0     | 90    |
|             |            | 6   | 1    | 1    | 0    | 12   | 81   | 210  | 123  | 18   | 2    | 2    | 0    | 0    | 0     | 456   |
|             | 15:00      | 1   | 0    | 1    | 1    | 6    | 17   | 40   | 36   | 4    | 1    | 0    | 0    | 0    | 0     | 107   |
|             | 15:15      | 5   | 0    | 0    | 0    | 3    | 29   | 57   | 24   | 8    | 3    | 0    | 0    | 0    | 0     | 129   |
|             | 15:30      | 1   | 1    | 0    | 1    | 2    | 13   | 53   | 43   | 7    | 2    | 0    | 0    | 0    | 0     | 123   |
|             | 15:45      | 1   | 0    | 0    | 0    | 0    | 16   | 53   | 29   | 9    | 2    | 0    | 0    | 0    | 0     | 110   |
|             |            | 8   | 1    | 1    | 2    | 11   | 75   | 203  | 132  | 28   | 8    | 0    | 0    | 0    | 0     | 469   |
|             | 16:00      | 2   | 1    | 0    | 0    | 0    | 11   | 52   | 40   | 10   | 2    | 0    | 0    | 0    | 0     | 118   |
|             | 16:15      | 3   | 2    | 0    | 0    | 2    | 7    | 32   | 39   | 10   | 3    | 1    | 0    | 0    | 0     | 99    |
|             | 16:30      | 3   | 0    | 0    | 0    | 2    | 18   | 35   | 33   | 9    | 2    | 1    | 0    | 0    | 0     | 103   |
|             | 16:45      | 2   | 0    | 1    | 0    | 2    | 15   | 63   | 24   | 11   | 1    | 1    | 0    | 0    | 0     | 120   |
|             |            | 10  | 3    | 1    | 0    | 6    | 51   | 182  | 136  | 40   | 8    | 3    | 0    | 0    | 0     | 440   |
|             | 17:00      | 2   | 0    | 0    | 2    | 0    | 14   | 37   | 36   | 8    | 1    | 0    | 0    | 0    | 0     | 100   |
|             | 17:15      | 1   | 0    | 0    | 0    | 2    | 18   | 47   | 33   | 10   | 0    | 0    | 0    | 0    | 0     | 111   |
|             | 17:30      | 3   | 1    | 1    | 1    | 3    | 20   | 48   | 35   | 11   | 2    | 0    | 0    | 0    | 0     | 125   |
|             | 17:45      | 3   | 2    | 0    | 0    | 1    | 10   | 41   | 35   | 7    | 1    | 0    | 1    | 0    | 0     | 101   |
|             |            | 9   | 3    | 1    | 3    | 6    | 62   | 173  | 139  | 36   | 4    | 0    | 1    | 0    | 0     | 437   |
|             | 18:00      | 3   | 0    | 2    | 0    | 0    | 9    | 40   | 33   | 7    | 2    | 0    | 0    | 0    | 0     | 96    |
|             | 18:15      | 2   | 0    | 0    | 1    | 1    | 5    | 27   | 42   | 11   | 4    | 1    | 0    | 0    | 0     | 94    |
|             | 18:30      | 2   | 0    | 1    | 0    | 1    | 15   | 52   | 26   | 8    | 1    | 0    | 0    | 0    | 0     | 106   |
|             | 18:45      | 1   | 0    | 0    | 0    | 1    | 10   | 44   | 25   | 6    | 1    | 1    | 1    | 0    | 0     | 90    |
|             |            | 8   | 0    | 3    | 1    | 3    | 39   | 163  | 126  | 32   | 8    | 2    | 1    | 0    | 0     | 386   |
|             | 19:00      | 1   | 0    | 0    | 0    | 0    | 17   | 52   | 38   | 7    | 1    | 0    | 0    | 0    | 0     | 116   |
|             | 19:15      | 0   | 0    | 0    | 0    | 2    | 6    | 43   | 22   | 12   | 0    | 0    | 0    | 0    | 0     | 85    |
|             | 19:30      | 0   | 0    | 0    | 0    | 1    | 10   | 36   | 21   | 4    | 1    | 0    | 0    | 0    | 0     | 73    |
|             | 19:45      | 0   | 1    | 0    | 0    | 2    | 16   | 46   | 11   | 4    | 0    | 2    | 0    | 0    | 0     | 82    |
|             |            | 1   | 1    | 0    | 0    | 5    | 49   | 177  | 92   | 27   | 2    | 2    | 0    | 0    | 0     | 356   |
|             | 20:00      | 2   | 0    | 0    | 0    | 1    | 16   | 50   | 23   | 1    | 3    | 0    | 0    | 0    | 0     | 96    |
|             | 20:15      | 0   | 0    | 0    | 0    | 4    | 19   | 34   | 21   | 6    | 0    | 0    | 0    | 0    | 0     | 84    |
|             | 20:30      | 0   | 0    | 0    | 0    | 0    | 12   | 32   | 10   | 4    | 0    | 0    | 0    | 0    | 0     | 58    |
|             | 20:45      | 4   | 0    | 0    | 1    | 3    | 14   | 21   | 16   | 1    | 0    | 0    | 0    | 0    | 0     | 60    |
|             |            | 6   | 0    | 0    | 1    | 8    | 61   | 137  | 70   | 12   | 3    | 0    | 0    | 0    | 0     | 298   |
|             | 21:00      | 2   | 0    | 0    | 0    | 0    | 10   | 23   | 13   | 4    | 0    | 0    | 0    | 0    | 0     | 52    |
|             | 21:15      | 0   | 0    | 0    | 0    | 0    | 5    | 31   | 9    | 3    | 0    | 0    | 0    | 0    | 0     | 48    |
|             | 21:30      | 1   | 0    | 0    | 0    | 0    | 6    | 31   | 6    | 3    | 0    | 0    | 1    | 0    | 0     | 48    |
|             | 21:45      | 0   | 0    | 0    | 0    | 2    | 4    | 20   | 4    | 3    | 0    | 0    | 0    | 0    | 0     | 33    |
|             |            | 3   | 0    | 0    | 0    | 2    | 25   | 105  | 32   | 13   | 0    | 0    | 1    | 0    | 0     | 181   |
|             | 22:00      | 0   | 0    | 0    | 0    | 1    | 6    | 18   | 4    | 1    | 1    | 0    | 0    | 0    | 0     | 31    |
|             | 22:15      | 0   | 0    | 0    | 0    | 1    | 3    | 6    | 6    | 1    | 1    | 0    | 0    | 0    | 0     | 18    |
|             | 22:30      | 0   | 0    | 0    | 0    | 0    | 4    | 16   | 5    | 2    | 1    | 0    | 0    | 0    | 0     | 28    |
|             | 22:45      | 0   | 0    | 0    | 0    | 0    | 3    | 7    | 10   | 2    | 0    | 0    | 0    | 0    | 0     | 22    |
|             |            | 0   | 0    | 0    | 0    | 2    | 16   | 47   | 25   | 6    | 3    | 0    | 0    | 0    | 0     | 99    |
|             | 23:00      | 0   | 0    | 0    | 0    | 2    | 3    | 3    | 7    | 2    | 0    | 0    | 0    | 0    | 0     | 17    |
|             | 23:15      | 0   | 0    | 0    | 0    | 0    | 1    | 9    | 2    | 3    | 1    | 0    | 0    | 0    | 0     | 16    |
|             | 23:30      | 0   | 0    | 0    | 0    | 0    | 1    | 4    | 1    | 4    | 0    | 1    | 0    | 0    | 0     | 11    |
|             | 23:45      | 1   | 0    | 0    | 0    | 0    | 3    | 1    | 2    | 1    | 0    | 0    | 0    | 0    | 0     | 8     |
|             |            | 1   | 0    | 0    | 0    | 2    | 8    | 17   | 12   | 10   | 1    | 1    | 0    | 0    | 0     | 52    |
|             | Total      | 65  | 12   | 8    | 7    | 73   | 593  | 1846 | 1213 | 277  | 53   | 10   | 3    | 0    | 0     | 4160  |
| Grand Total |            | 154 | 22   | 28   | 51   | 215  | 1285 | 4068 | 2701 | 583  | 96   | 12   | 7    | 0    | 0     | 9222  |

15th Percentile : 38 MPH  
50th Percentile : 43 MPH  
85th Percentile : 48 MPH  
95th Percentile : 52 MPH

Stats Mean Speed(Average) : 44 MPH  
10 MPH Pace Speed : 41-50 MPH  
Number in Pace : 6769

|                                |       |
|--------------------------------|-------|
| Percent in Pace :              | 73.4% |
| Number of Vehicles > 55 MPH :  | 115   |
| Percent of Vehicles > 55 MPH : | 1.2%  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 13

Station ID: 13

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

| Start Time  | 11-May-16<br>Wed | NB         |           | Hour Totals |           |
|-------------|------------------|------------|-----------|-------------|-----------|
|             |                  | Morning    | Afternoon | Morning     | Afternoon |
| 12:00       |                  | 53         | 202       |             |           |
| 12:15       |                  | 62         | 217       |             |           |
| 12:30       |                  | 28         | 199       |             |           |
| 12:45       |                  | 30         | 210       | 173         | 828       |
| 01:00       |                  | 23         | 187       |             |           |
| 01:15       |                  | 27         | 193       |             |           |
| 01:30       |                  | 22         | 197       |             |           |
| 01:45       |                  | 31         | 193       | 103         | 770       |
| 02:00       |                  | 16         | 222       |             |           |
| 02:15       |                  | 24         | 235       |             |           |
| 02:30       |                  | 20         | 219       |             |           |
| 02:45       |                  | 12         | 218       | 72          | 894       |
| 03:00       |                  | 17         | 209       |             |           |
| 03:15       |                  | 17         | 220       |             |           |
| 03:30       |                  | 38         | 204       |             |           |
| 03:45       |                  | 22         | 213       | 94          | 846       |
| 04:00       |                  | 27         | 263       |             |           |
| 04:15       |                  | 33         | 242       |             |           |
| 04:30       |                  | 50         | 209       |             |           |
| 04:45       |                  | 61         | 226       | 171         | 940       |
| 05:00       |                  | 79         | 261       |             |           |
| 05:15       |                  | 95         | 226       |             |           |
| 05:30       |                  | 129        | 221       |             |           |
| 05:45       |                  | 175        | 218       | 478         | 926       |
| 06:00       |                  | 171        | 209       |             |           |
| 06:15       |                  | 227        | 193       |             |           |
| 06:30       |                  | 269        | 202       |             |           |
| 06:45       |                  | 284        | 185       | 951         | 789       |
| 07:00       |                  | 294        | 192       |             |           |
| 07:15       |                  | 304        | 190       |             |           |
| 07:30       |                  | 279        | 188       |             |           |
| 07:45       |                  | 286        | 152       | 1163        | 722       |
| 08:00       |                  | 261        | 155       |             |           |
| 08:15       |                  | 265        | 162       |             |           |
| 08:30       |                  | 259        | 133       |             |           |
| 08:45       |                  | 232        | 133       | 1017        | 583       |
| 09:00       |                  | 223        | 165       |             |           |
| 09:15       |                  | 204        | 136       |             |           |
| 09:30       |                  | 205        | 131       |             |           |
| 09:45       |                  | 191        | 92        | 823         | 524       |
| 10:00       |                  | 194        | 88        |             |           |
| 10:15       |                  | 177        | 87        |             |           |
| 10:30       |                  | 189        | 90        |             |           |
| 10:45       |                  | 178        | 70        | 738         | 335       |
| 11:00       |                  | 191        | 59        |             |           |
| 11:15       |                  | 203        | 52        |             |           |
| 11:30       |                  | 171        | 52        |             |           |
| 11:45       |                  | 211        | 51        | 776         | 214       |
| Total       |                  | 6559       | 8371      |             |           |
| Percent     |                  | 43.9%      | 56.1%     |             |           |
| Grand Total |                  | 6559       | 8371      |             |           |
| Percent     |                  | 43.9%      | 56.1%     |             |           |
| ADT         |                  | ADT 14,930 |           | AADT 14,930 |           |

# All Traffic Data Service, Inc

1336 Farmer Road  
Conyers, Ga 30012  
**404-374-1283**

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Site Code: 13.5

Station ID: 13.5

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

| Start Time  | 11-May-16<br>Wed | SB         |           | Hour Totals |           |
|-------------|------------------|------------|-----------|-------------|-----------|
|             |                  | Morning    | Afternoon | Morning     | Afternoon |
| 12:00       |                  | 40         | 208       |             |           |
| 12:15       |                  | 41         | 243       |             |           |
| 12:30       |                  | 31         | 221       |             |           |
| 12:45       |                  | 45         | 203       | 157         | 875       |
| 01:00       |                  | 33         | 195       |             |           |
| 01:15       |                  | 34         | 230       |             |           |
| 01:30       |                  | 20         | 212       |             |           |
| 01:45       |                  | 19         | 198       | 106         | 835       |
| 02:00       |                  | 37         | 253       |             |           |
| 02:15       |                  | 15         | 206       |             |           |
| 02:30       |                  | 14         | 237       |             |           |
| 02:45       |                  | 22         | 233       | 88          | 929       |
| 03:00       |                  | 25         | 243       |             |           |
| 03:15       |                  | 19         | 239       |             |           |
| 03:30       |                  | 19         | 255       |             |           |
| 03:45       |                  | 19         | 250       | 82          | 987       |
| 04:00       |                  | 25         | 260       |             |           |
| 04:15       |                  | 26         | 185       |             |           |
| 04:30       |                  | 43         | 221       |             |           |
| 04:45       |                  | 57         | 201       | 151         | 867       |
| 05:00       |                  | 60         | 212       |             |           |
| 05:15       |                  | 73         | 227       |             |           |
| 05:30       |                  | 90         | 209       |             |           |
| 05:45       |                  | 102        | 212       | 325         | 860       |
| 06:00       |                  | 129        | 202       |             |           |
| 06:15       |                  | 139        | 216       |             |           |
| 06:30       |                  | 186        | 224       |             |           |
| 06:45       |                  | 193        | 267       | 647         | 909       |
| 07:00       |                  | 218        | 250       |             |           |
| 07:15       |                  | 212        | 253       |             |           |
| 07:30       |                  | 212        | 207       |             |           |
| 07:45       |                  | 231        | 182       | 873         | 892       |
| 08:00       |                  | 253        | 197       |             |           |
| 08:15       |                  | 223        | 168       |             |           |
| 08:30       |                  | 227        | 137       |             |           |
| 08:45       |                  | 215        | 143       | 918         | 645       |
| 09:00       |                  | 218        | 129       |             |           |
| 09:15       |                  | 222        | 141       |             |           |
| 09:30       |                  | 235        | 128       |             |           |
| 09:45       |                  | 214        | 101       | 889         | 499       |
| 10:00       |                  | 205        | 124       |             |           |
| 10:15       |                  | 182        | 84        |             |           |
| 10:30       |                  | 202        | 68        |             |           |
| 10:45       |                  | 193        | 73        | 782         | 349       |
| 11:00       |                  | 196        | 88        |             |           |
| 11:15       |                  | 202        | 84        |             |           |
| 11:30       |                  | 222        | 71        |             |           |
| 11:45       |                  | 202        | 57        | 822         | 300       |
| Total       |                  | 5840       | 8947      |             |           |
| Percent     |                  | 39.5%      | 60.5%     |             |           |
| Grand Total |                  | 5840       | 8947      |             |           |
| Percent     |                  | 39.5%      | 60.5%     |             |           |
| ADT         |                  | ADT 14,787 |           | AADT 14,787 |           |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 13

Station ID: 13

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

NB

| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 05/11/16   | 0     | 45              | 6           | 0     | 1             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 53    |
| 00:15      | 0     | 48              | 7           | 0     | 3             | 1             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 61    |
| 00:30      | 1     | 24              | 2           | 0     | 0             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 28    |
| 00:45      | 0     | 22              | 5           | 0     | 3             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 30    |
|            | 1     | 139             | 20          | 0     | 7             | 1             | 0             | 1             | 3             | 0             | 0            | 0            | 0            | 172   |
| 01:00      | 0     | 18              | 3           | 0     | 0             | 1             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 23    |
| 01:15      | 1     | 20              | 2           | 0     | 1             | 2             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 27    |
| 01:30      | 0     | 18              | 1           | 1     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 22    |
| 01:45      | 1     | 25              | 3           | 0     | 1             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 31    |
|            | 2     | 81              | 9           | 1     | 4             | 4             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 103   |
| 02:00      | 0     | 13              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 16    |
| 02:15      | 0     | 18              | 4           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 24    |
| 02:30      | 0     | 17              | 2           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 20    |
| 02:45      | 0     | 8               | 2           | 0     | 0             | 0             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 12    |
|            | 0     | 56              | 11          | 0     | 3             | 0             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 72    |
| 03:00      | 0     | 14              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 17    |
| 03:15      | 0     | 11              | 4           | 1     | 0             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 17    |
| 03:30      | 0     | 25              | 8           | 0     | 3             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 38    |
| 03:45      | 0     | 19              | 3           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 22    |
|            | 0     | 69              | 18          | 1     | 3             | 0             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 94    |
| 04:00      | 0     | 22              | 2           | 0     | 2             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 27    |
| 04:15      | 0     | 25              | 6           | 0     | 1             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 33    |
| 04:30      | 1     | 32              | 12          | 0     | 3             | 1             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 50    |
| 04:45      | 1     | 42              | 12          | 2     | 2             | 1             | 0             | 0             | 0             | 1             | 0            | 0            | 0            | 61    |
|            | 2     | 121             | 32          | 2     | 8             | 2             | 0             | 1             | 2             | 1             | 0            | 0            | 0            | 171   |
| 05:00      | 0     | 53              | 17          | 2     | 4             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 78    |
| 05:15      | 1     | 67              | 18          | 1     | 6             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 95    |
| 05:30      | 1     | 79              | 34          | 2     | 8             | 1             | 0             | 1             | 1             | 0             | 0            | 1            | 1            | 129   |
| 05:45      | 2     | 119             | 35          | 3     | 9             | 1             | 0             | 5             | 0             | 1             | 0            | 0            | 0            | 175   |
|            | 4     | 318             | 104         | 8     | 27            | 3             | 0             | 9             | 1             | 1             | 0            | 1            | 1            | 477   |
| 06:00      | 1     | 111             | 40          | 2     | 12            | 1             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 170   |
| 06:15      | 2     | 158             | 38          | 2     | 13            | 2             | 0             | 7             | 2             | 2             | 0            | 0            | 1            | 227   |
| 06:30      | 4     | 195             | 47          | 3     | 8             | 2             | 0             | 6             | 1             | 2             | 0            | 0            | 0            | 268   |
| 06:45      | 1     | 209             | 47          | 0     | 16            | 1             | 0             | 7             | 2             | 0             | 0            | 0            | 0            | 283   |
|            | 8     | 673             | 172         | 7     | 49            | 6             | 0             | 23            | 5             | 4             | 0            | 0            | 1            | 948   |
| 07:00      | 3     | 208             | 50          | 3     | 15            | 3             | 0             | 7             | 3             | 1             | 0            | 0            | 0            | 293   |
| 07:15      | 0     | 218             | 54          | 1     | 11            | 1             | 0             | 11            | 5             | 2             | 1            | 0            | 0            | 304   |
| 07:30      | 3     | 190             | 47          | 6     | 18            | 2             | 0             | 11            | 0             | 0             | 0            | 0            | 1            | 278   |
| 07:45      | 3     | 203             | 50          | 5     | 14            | 2             | 0             | 6             | 1             | 0             | 0            | 0            | 1            | 285   |
|            | 9     | 819             | 201         | 15    | 58            | 8             | 0             | 35            | 9             | 3             | 1            | 0            | 2            | 1160  |
| 08:00      | 3     | 196             | 45          | 2     | 8             | 3             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 260   |
| 08:15      | 8     | 179             | 42          | 1     | 15            | 3             | 0             | 10            | 2             | 3             | 0            | 0            | 1            | 264   |
| 08:30      | 3     | 147             | 63          | 4     | 25            | 3             | 0             | 8             | 2             | 0             | 2            | 1            | 0            | 258   |
| 08:45      | 2     | 149             | 55          | 4     | 14            | 2             | 0             | 5             | 0             | 0             | 0            | 0            | 0            | 231   |
|            | 16    | 671             | 205         | 11    | 62            | 11            | 0             | 25            | 5             | 3             | 2            | 1            | 1            | 1013  |
| 09:00      | 6     | 127             | 58          | 4     | 14            | 6             | 0             | 3             | 4             | 1             | 0            | 0            | 0            | 223   |
| 09:15      | 4     | 127             | 40          | 3     | 17            | 3             | 0             | 6             | 4             | 0             | 0            | 0            | 0            | 204   |
| 09:30      | 2     | 108             | 51          | 1     | 25            | 4             | 0             | 8             | 3             | 1             | 0            | 0            | 1            | 204   |
| 09:45      | 3     | 106             | 48          | 4     | 15            | 1             | 0             | 8             | 4             | 0             | 0            | 0            | 1            | 190   |
|            | 15    | 468             | 197         | 12    | 71            | 14            | 0             | 25            | 15            | 2             | 0            | 0            | 2            | 821   |
| 10:00      | 3     | 113             | 44          | 3     | 15            | 3             | 0             | 9             | 4             | 0             | 0            | 0            | 0            | 194   |
| 10:15      | 6     | 109             | 32          | 1     | 12            | 5             | 0             | 8             | 2             | 0             | 1            | 0            | 0            | 176   |
| 10:30      | 0     | 108             | 44          | 2     | 22            | 0             | 0             | 9             | 1             | 0             | 0            | 0            | 2            | 188   |
| 10:45      | 0     | 111             | 41          | 3     | 14            | 0             | 0             | 6             | 1             | 1             | 1            | 0            | 0            | 178   |
|            | 9     | 441             | 161         | 9     | 63            | 8             | 0             | 32            | 8             | 1             | 2            | 0            | 2            | 736   |
| 11:00      | 1     | 107             | 52          | 6     | 16            | 2             | 0             | 4             | 2             | 0             | 0            | 0            | 0            | 190   |
| 11:15      | 7     | 109             | 44          | 6     | 25            | 4             | 0             | 3             | 4             | 1             | 0            | 0            | 0            | 203   |
| 11:30      | 0     | 98              | 46          | 5     | 17            | 0             | 0             | 3             | 1             | 0             | 0            | 0            | 0            | 170   |
| 11:45      | 5     | 114             | 57          | 4     | 15            | 5             | 0             | 5             | 6             | 0             | 0            | 0            | 0            | 211   |
|            | 13    | 428             | 199         | 21    | 73            | 11            | 0             | 15            | 13            | 1             | 0            | 0            | 0            | 774   |
| Total      | 79    | 4284            | 1329        | 87    | 428           | 68            | 0             | 168           | 66            | 16            | 5            | 2            | 9            | 6541  |
| Percent    | 1.2%  | 65.5%           | 20.3%       | 1.3%  | 6.5%          | 1.0%          | 0.0%          | 2.6%          | 1.0%          | 0.2%          | 0.1%         | 0.0%         | 0.1%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 2

Site Code: 13

Station ID: 13

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

NB

| Start Time  | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|-------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 12 PM       | 3     | 116             | 46          | 6     | 23            | 2             | 0             | 2             | 1             | 0             | 1            | 0            | 1            | 201   |
| 12:15       | 2     | 134             | 42          | 3     | 24            | 1             | 1             | 6             | 1             | 2             | 1            | 0            | 0            | 217   |
| 12:30       | 3     | 131             | 43          | 2     | 16            | 1             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 199   |
| 12:45       | 0     | 142             | 42          | 2     | 11            | 3             | 0             | 5             | 2             | 1             | 0            | 0            | 1            | 209   |
| 13:00       | 8     | 523             | 173         | 13    | 74            | 7             | 1             | 15            | 5             | 3             | 2            | 0            | 2            | 826   |
| 13:15       | 3     | 107             | 47          | 1     | 17            | 2             | 0             | 5             | 3             | 1             | 0            | 0            | 0            | 186   |
| 13:30       | 2     | 105             | 52          | 4     | 19            | 2             | 0             | 7             | 1             | 0             | 0            | 0            | 0            | 192   |
| 13:45       | 7     | 112             | 47          | 2     | 17            | 4             | 1             | 6             | 0             | 0             | 0            | 0            | 0            | 196   |
| 14:00       | 4     | 115             | 47          | 3     | 12            | 3             | 0             | 6             | 2             | 1             | 0            | 0            | 0            | 193   |
| 14:15       | 16    | 439             | 193         | 10    | 65            | 11            | 1             | 24            | 6             | 2             | 0            | 0            | 0            | 767   |
| 14:30       | 3     | 130             | 49          | 4     | 19            | 2             | 0             | 12            | 2             | 1             | 0            | 0            | 0            | 222   |
| 14:45       | 6     | 157             | 48          | 2     | 16            | 1             | 0             | 4             | 1             | 0             | 0            | 0            | 0            | 235   |
| 15:00       | 5     | 141             | 45          | 0     | 13            | 4             | 0             | 7             | 2             | 1             | 0            | 0            | 0            | 218   |
| 15:15       | 5     | 136             | 47          | 2     | 18            | 0             | 0             | 4             | 3             | 2             | 1            | 0            | 0            | 218   |
| 15:30       | 19    | 564             | 189         | 8     | 66            | 7             | 0             | 27            | 8             | 4             | 1            | 0            | 0            | 893   |
| 15:45       | 2     | 135             | 49          | 4     | 11            | 1             | 0             | 5             | 1             | 0             | 0            | 0            | 0            | 208   |
| 16:00       | 2     | 130             | 53          | 5     | 16            | 0             | 0             | 6             | 5             | 0             | 1            | 1            | 1            | 220   |
| 16:15       | 1     | 131             | 42          | 1     | 14            | 1             | 0             | 6             | 1             | 1             | 3            | 0            | 2            | 203   |
| 16:30       | 3     | 141             | 41          | 4     | 15            | 1             | 0             | 5             | 0             | 2             | 0            | 0            | 1            | 213   |
| 16:45       | 8     | 537             | 185         | 14    | 56            | 3             | 0             | 22            | 7             | 3             | 4            | 1            | 4            | 844   |
| 17:00       | 4     | 172             | 52          | 4     | 15            | 4             | 0             | 9             | 0             | 3             | 0            | 0            | 0            | 263   |
| 17:15       | 3     | 151             | 52          | 0     | 17            | 0             | 0             | 16            | 0             | 0             | 1            | 1            | 0            | 241   |
| 17:30       | 0     | 135             | 44          | 5     | 13            | 2             | 0             | 6             | 2             | 0             | 0            | 0            | 2            | 209   |
| 17:45       | 4     | 154             | 37          | 2     | 11            | 2             | 0             | 10            | 3             | 2             | 1            | 0            | 0            | 226   |
| 18:00       | 11    | 612             | 185         | 11    | 56            | 8             | 0             | 41            | 5             | 5             | 2            | 1            | 2            | 939   |
| 18:15       | 6     | 178             | 46          | 4     | 12            | 5             | 0             | 7             | 0             | 1             | 0            | 0            | 1            | 260   |
| 18:30       | 6     | 164             | 35          | 2     | 10            | 5             | 0             | 3             | 0             | 0             | 0            | 1            | 0            | 226   |
| 18:45       | 3     | 158             | 38          | 3     | 8             | 2             | 0             | 6             | 1             | 1             | 0            | 0            | 0            | 220   |
| 19:00       | 0     | 149             | 46          | 0     | 7             | 3             | 0             | 9             | 0             | 1             | 0            | 0            | 2            | 217   |
| 19:15       | 15    | 649             | 165         | 9     | 37            | 15            | 0             | 25            | 1             | 3             | 0            | 1            | 3            | 923   |
| 19:30       | 0     | 164             | 34          | 2     | 6             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 209   |
| 19:45       | 1     | 140             | 31          | 1     | 7             | 0             | 1             | 8             | 2             | 1             | 0            | 0            | 0            | 192   |
| 20:00       | 1     | 150             | 27          | 1     | 13            | 1             | 0             | 7             | 0             | 1             | 0            | 0            | 0            | 201   |
| 20:15       | 1     | 135             | 35          | 0     | 6             | 0             | 0             | 7             | 0             | 0             | 0            | 0            | 0            | 184   |
| 20:30       | 3     | 589             | 127         | 4     | 32            | 1             | 1             | 25            | 2             | 2             | 0            | 0            | 0            | 786   |
| 20:45       | 1     | 141             | 37          | 2     | 3             | 1             | 0             | 5             | 0             | 0             | 0            | 1            | 0            | 191   |
| 21:00       | 2     | 131             | 35          | 3     | 9             | 1             | 0             | 7             | 1             | 0             | 0            | 0            | 1            | 190   |
| 21:15       | 0     | 139             | 32          | 1     | 8             | 1             | 0             | 3             | 2             | 2             | 0            | 0            | 0            | 188   |
| 21:30       | 0     | 107             | 32          | 0     | 7             | 0             | 0             | 2             | 2             | 0             | 1            | 0            | 0            | 151   |
| 21:45       | 3     | 518             | 136         | 6     | 27            | 3             | 0             | 17            | 5             | 2             | 1            | 1            | 1            | 720   |
| 22:00       | 1     | 108             | 29          | 1     | 8             | 1             | 1             | 5             | 0             | 1             | 0            | 0            | 0            | 155   |
| 22:15       | 0     | 126             | 24          | 4     | 4             | 0             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 162   |
| 22:30       | 0     | 99              | 22          | 0     | 7             | 0             | 0             | 3             | 0             | 0             | 0            | 0            | 1            | 132   |
| 22:45       | 3     | 86              | 32          | 0     | 7             | 1             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 132   |
| 23:00       | 4     | 419             | 107         | 5     | 26            | 2             | 1             | 15            | 0             | 1             | 0            | 0            | 1            | 581   |
| 23:15       | 0     | 131             | 22          | 1     | 5             | 1             | 0             | 4             | 0             | 1             | 0            | 0            | 0            | 165   |
| 23:30       | 3     | 99              | 24          | 0     | 5             | 1             | 0             | 1             | 1             | 1             | 1            | 0            | 0            | 136   |
| 23:45       | 0     | 102             | 21          | 1     | 3             | 0             | 0             | 1             | 1             | 0             | 0            | 1            | 0            | 130   |
| 24:00       | 0     | 75              | 14          | 1     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 91    |
| 24:15       | 3     | 407             | 81          | 3     | 14            | 2             | 0             | 6             | 2             | 2             | 1            | 1            | 0            | 522   |
| 24:30       | 0     | 64              | 20          | 0     | 1             | 0             | 0             | 1             | 2             | 0             | 0            | 0            | 0            | 88    |
| 24:45       | 0     | 70              | 12          | 2     | 2             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 87    |
| 25:00       | 1     | 64              | 16          | 0     | 4             | 2             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 90    |
| 25:15       | 2     | 56              | 7           | 0     | 3             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 70    |
| 25:30       | 3     | 254             | 55          | 2     | 10            | 2             | 0             | 6             | 3             | 0             | 0            | 0            | 0            | 335   |
| 25:45       | 0     | 44              | 10          | 0     | 4             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 59    |
| 26:00       | 1     | 43              | 5           | 0     | 1             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 52    |
| 26:15       | 0     | 45              | 6           | 1     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 52    |
| 26:30       | 0     | 37              | 7           | 0     | 3             | 0             | 0             | 2             | 2             | 0             | 0            | 0            | 0            | 51    |
| 26:45       | 1     | 169             | 28          | 1     | 8             | 1             | 0             | 4             | 2             | 0             | 0            | 0            | 0            | 214   |
| Total       | 94    | 5680            | 1624        | 86    | 471           | 62            | 4             | 227           | 46            | 27            | 11           | 5            | 13           | 8350  |
| Percent     | 1.1%  | 68.0%           | 19.4%       | 1.0%  | 5.6%          | 0.7%          | 0.0%          | 2.7%          | 0.6%          | 0.3%          | 0.1%         | 0.1%         | 0.2%         |       |
| Grand Total | 173   | 9964            | 2953        | 173   | 899           | 130           | 4             | 395           | 112           | 43            | 16           | 7            | 22           | 14891 |
| Percent     | 1.2%  | 66.9%           | 19.8%       | 1.2%  | 6.0%          | 0.9%          | 0.0%          | 2.7%          | 0.8%          | 0.3%          | 0.1%         | 0.0%         | 0.1%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 13.5

Station ID: 13.5

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

SB

| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 05/11/16   | 0     | 39              | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 40    |
| 00:15      | 0     | 38              | 1           | 1     | 0             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 41    |
| 00:30      | 0     | 26              | 0           | 1     | 1             | 1             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 31    |
| 00:45      | 0     | 38              | 3           | 0     | 1             | 1             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 45    |
| 01:00      | 0     | 141             | 5           | 2     | 2             | 2             | 0             | 1             | 4             | 0             | 0            | 0            | 0            | 157   |
| 01:15      | 0     | 29              | 2           | 0     | 0             | 0             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 33    |
| 01:30      | 0     | 31              | 2           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 34    |
| 01:45      | 0     | 16              | 4           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 20    |
| 02:00      | 0     | 18              | 1           | 0     | 0             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 19    |
| 02:15      | 0     | 94              | 9           | 0     | 1             | 0             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 106   |
| 02:30      | 0     | 36              | 0           | 0     | 0             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 37    |
| 02:45      | 1     | 10              | 2           | 0     | 1             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 15    |
| 03:00      | 0     | 10              | 2           | 0     | 0             | 0             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 14    |
| 03:15      | 1     | 18              | 1           | 0     | 1             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 22    |
| 03:30      | 2     | 74              | 5           | 0     | 2             | 2             | 0             | 1             | 2             | 0             | 0            | 0            | 0            | 88    |
| 03:45      | 0     | 19              | 4           | 0     | 0             | 0             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 25    |
| 04:00      | 1     | 13              | 2           | 0     | 0             | 1             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 19    |
| 04:15      | 0     | 14              | 3           | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 19    |
| 04:30      | 0     | 15              | 3           | 0     | 0             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 19    |
| 04:45      | 1     | 61              | 12          | 0     | 2             | 1             | 0             | 1             | 4             | 0             | 0            | 0            | 0            | 82    |
| 05:00      | 0     | 17              | 4           | 0     | 1             | 1             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 25    |
| 05:15      | 0     | 21              | 1           | 0     | 0             | 3             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 26    |
| 05:30      | 0     | 35              | 3           | 0     | 3             | 0             | 0             | 0             | 2             | 0             | 0            | 0            | 0            | 43    |
| 05:45      | 0     | 48              | 8           | 0     | 1             | 0             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 57    |
| 06:00      | 0     | 121             | 16          | 0     | 5             | 4             | 0             | 1             | 4             | 0             | 0            | 0            | 0            | 151   |
| 06:15      | 2     | 45              | 8           | 0     | 2             | 1             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 60    |
| 06:30      | 0     | 61              | 7           | 0     | 4             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 73    |
| 06:45      | 0     | 73              | 11          | 3     | 1             | 0             | 0             | 2             | 0             | 0             | 0            | 0            | 0            | 90    |
| 07:00      | 0     | 82              | 12          | 1     | 2             | 1             | 1             | 1             | 1             | 0             | 0            | 0            | 0            | 101   |
| 07:15      | 2     | 261             | 38          | 4     | 9             | 2             | 1             | 4             | 3             | 0             | 0            | 0            | 0            | 324   |
| 07:30      | 1     | 94              | 24          | 1     | 4             | 2             | 0             | 1             | 0             | 0             | 1            | 0            | 0            | 128   |
| 07:45      | 0     | 104             | 23          | 1     | 5             | 0             | 0             | 1             | 4             | 1             | 0            | 0            | 0            | 139   |
| 08:00      | 0     | 150             | 24          | 0     | 6             | 1             | 0             | 3             | 1             | 0             | 0            | 0            | 0            | 185   |
| 08:15      | 1     | 144             | 34          | 2     | 5             | 1             | 0             | 3             | 1             | 0             | 1            | 0            | 0            | 192   |
| 08:30      | 2     | 492             | 105         | 4     | 20            | 4             | 0             | 8             | 6             | 1             | 2            | 0            | 0            | 644   |
| 08:45      | 4     | 159             | 40          | 1     | 4             | 3             | 0             | 2             | 3             | 0             | 0            | 0            | 0            | 216   |
| 09:00      | 4     | 158             | 36          | 0     | 9             | 2             | 0             | 1             | 1             | 0             | 0            | 0            | 0            | 211   |
| 09:15      | 2     | 138             | 40          | 3     | 15            | 2             | 0             | 8             | 0             | 2             | 0            | 0            | 1            | 211   |
| 09:30      | 6     | 158             | 47          | 2     | 10            | 1             | 0             | 4             | 3             | 0             | 0            | 0            | 0            | 231   |
| 09:45      | 16    | 613             | 163         | 6     | 38            | 8             | 0             | 15            | 7             | 2             | 0            | 0            | 1            | 869   |
| 10:00      | 3     | 200             | 29          | 5     | 11            | 0             | 0             | 1             | 2             | 1             | 0            | 0            | 0            | 252   |
| 10:15      | 2     | 156             | 42          | 2     | 11            | 1             | 0             | 8             | 0             | 0             | 0            | 0            | 0            | 222   |
| 10:30      | 3     | 156             | 46          | 2     | 12            | 1             | 0             | 3             | 2             | 1             | 0            | 0            | 0            | 226   |
| 10:45      | 4     | 149             | 42          | 4     | 7             | 3             | 0             | 4             | 1             | 0             | 0            | 0            | 0            | 214   |
| 11:00      | 12    | 661             | 159         | 13    | 41            | 5             | 0             | 16            | 5             | 2             | 0            | 0            | 0            | 914   |
| 11:15      | 0     | 153             | 40          | 3     | 10            | 1             | 0             | 5             | 4             | 0             | 0            | 0            | 1            | 217   |
| 11:30      | 4     | 140             | 53          | 3     | 8             | 4             | 0             | 5             | 2             | 1             | 0            | 0            | 1            | 221   |
| 11:45      | 3     | 147             | 39          | 6     | 22            | 5             | 0             | 9             | 2             | 0             | 0            | 0            | 1            | 234   |
| 12:00      | 2     | 139             | 47          | 1     | 10            | 3             | 0             | 5             | 4             | 0             | 0            | 1            | 1            | 213   |
| 12:15      | 9     | 579             | 179         | 13    | 50            | 13            | 0             | 24            | 12            | 1             | 0            | 1            | 4            | 885   |
| 12:30      | 1     | 143             | 42          | 1     | 11            | 2             | 0             | 2             | 1             | 1             | 0            | 0            | 1            | 205   |
| 12:45      | 3     | 123             | 36          | 3     | 7             | 1             | 0             | 2             | 6             | 0             | 0            | 0            | 0            | 181   |
| 13:00      | 5     | 134             | 39          | 2     | 13            | 5             | 0             | 1             | 2             | 0             | 0            | 0            | 0            | 201   |
| 13:15      | 5     | 121             | 42          | 3     | 10            | 4             | 0             | 3             | 3             | 0             | 0            | 0            | 1            | 192   |
| 13:30      | 14    | 521             | 159         | 9     | 41            | 12            | 0             | 8             | 12            | 1             | 0            | 0            | 2            | 779   |
| 13:45      | 2     | 133             | 40          | 2     | 10            | 1             | 0             | 1             | 5             | 0             | 0            | 0            | 1            | 195   |
| 14:00      | 4     | 132             | 44          | 1     | 12            | 5             | 0             | 4             | 0             | 0             | 0            | 0            | 0            | 202   |
| 14:15      | 3     | 138             | 44          | 1     | 12            | 8             | 0             | 9             | 3             | 0             | 1            | 0            | 3            | 222   |
| 14:30      | 4     | 134             | 42          | 3     | 11            | 0             | 0             | 3             | 2             | 0             | 1            | 0            | 1            | 201   |
| 14:45      | 13    | 537             | 170         | 7     | 45            | 14            | 0             | 17            | 10            | 0             | 2            | 0            | 5            | 820   |
| Total      | 71    | 4155            | 1020        | 58    | 256           | 67            | 1             | 96            | 71            | 7             | 4            | 1            | 12           | 5819  |
| Percent    | 1.2%  | 71.4%           | 17.5%       | 1.0%  | 4.4%          | 1.2%          | 0.0%          | 1.6%          | 1.2%          | 0.1%          | 0.1%         | 0.0%         | 0.2%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
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Page 2

Site Code: 13.5

Station ID: 13.5

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

SB

| Start Time  | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
|-------------|-------|-----------------|-------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------|
| 12 PM       | 3     | 143             | 38          | 8     | 11            | 2             | 0             | 3             | 0             | 0             | 0            | 0            | 0            | 208   |
| 12:15       | 5     | 146             | 52          | 7     | 27            | 1             | 0             | 4             | 1             | 0             | 0            | 0            | 0            | 243   |
| 12:30       | 8     | 136             | 50          | 3     | 17            | 2             | 0             | 3             | 1             | 0             | 0            | 0            | 0            | 220   |
| 12:45       | 6     | 121             | 45          | 5     | 17            | 4             | 0             | 4             | 1             | 0             | 0            | 0            | 0            | 203   |
| 13:00       | 22    | 546             | 185         | 23    | 72            | 9             | 0             | 14            | 3             | 0             | 0            | 0            | 0            | 874   |
| 13:15       | 4     | 124             | 42          | 4     | 17            | 1             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 195   |
| 13:30       | 5     | 135             | 47          | 8     | 25            | 3             | 0             | 5             | 2             | 0             | 0            | 0            | 0            | 230   |
| 13:45       | 6     | 137             | 38          | 2     | 16            | 4             | 0             | 4             | 4             | 0             | 0            | 0            | 1            | 212   |
| 14:00       | 1     | 131             | 47          | 0     | 8             | 4             | 1             | 3             | 1             | 1             | 0            | 0            | 0            | 197   |
| 14:15       | 16    | 527             | 174         | 14    | 66            | 12            | 1             | 14            | 8             | 1             | 0            | 0            | 1            | 834   |
| 14:30       | 6     | 170             | 48          | 3     | 9             | 4             | 0             | 6             | 3             | 1             | 0            | 0            | 1            | 251   |
| 14:45       | 5     | 125             | 49          | 0     | 18            | 2             | 0             | 4             | 0             | 2             | 0            | 0            | 0            | 205   |
| 15:00       | 5     | 160             | 45          | 0     | 8             | 6             | 0             | 5             | 4             | 1             | 1            | 1            | 0            | 236   |
| 15:15       | 3     | 157             | 48          | 3     | 11            | 4             | 0             | 4             | 2             | 1             | 0            | 0            | 0            | 233   |
| 15:30       | 19    | 612             | 190         | 6     | 46            | 16            | 0             | 19            | 9             | 5             | 1            | 1            | 1            | 925   |
| 15:45       | 3     | 184             | 38          | 2     | 6             | 2             | 0             | 5             | 1             | 1             | 0            | 0            | 0            | 242   |
| 16:00       | 9     | 157             | 47          | 1     | 15            | 0             | 0             | 6             | 1             | 1             | 0            | 1            | 0            | 238   |
| 16:15       | 4     | 169             | 56          | 4     | 11            | 2             | 0             | 6             | 2             | 0             | 0            | 0            | 1            | 255   |
| 16:30       | 8     | 172             | 45          | 1     | 11            | 1             | 1             | 8             | 2             | 0             | 1            | 0            | 0            | 250   |
| 16:45       | 24    | 682             | 186         | 8     | 43            | 5             | 1             | 25            | 6             | 2             | 1            | 1            | 1            | 985   |
| 17:00       | 6     | 170             | 51          | 2     | 12            | 3             | 1             | 5             | 6             | 2             | 1            | 0            | 1            | 260   |
| 17:15       | 8     | 119             | 36          | 2     | 5             | 3             | 0             | 5             | 2             | 2             | 0            | 1            | 2            | 185   |
| 17:30       | 7     | 139             | 45          | 3     | 11            | 5             | 0             | 7             | 2             | 1             | 1            | 0            | 0            | 221   |
| 17:45       | 4     | 137             | 37          | 2     | 8             | 2             | 0             | 8             | 2             | 0             | 0            | 1            | 0            | 201   |
| 18:00       | 25    | 565             | 169         | 9     | 36            | 13            | 1             | 25            | 12            | 5             | 2            | 2            | 3            | 867   |
| 18:15       | 7     | 129             | 47          | 2     | 10            | 6             | 0             | 9             | 2             | 1             | 0            | 0            | 0            | 213   |
| 18:30       | 4     | 146             | 48          | 2     | 9             | 8             | 0             | 9             | 1             | 1             | 0            | 0            | 0            | 228   |
| 18:45       | 8     | 129             | 49          | 2     | 7             | 3             | 0             | 10            | 1             | 0             | 0            | 0            | 1            | 210   |
| 19:00       | 8     | 134             | 44          | 1     | 8             | 8             | 0             | 4             | 2             | 1             | 0            | 1            | 0            | 211   |
| 19:15       | 27    | 538             | 188         | 7     | 34            | 25            | 0             | 32            | 6             | 3             | 0            | 1            | 1            | 862   |
| 19:30       | 3     | 140             | 37          | 2     | 6             | 3             | 0             | 7             | 2             | 1             | 0            | 2            | 0            | 203   |
| 19:45       | 5     | 142             | 41          | 2     | 10            | 5             | 1             | 7             | 1             | 3             | 1            | 0            | 0            | 218   |
| 20:00       | 4     | 148             | 51          | 1     | 8             | 2             | 0             | 6             | 2             | 0             | 2            | 0            | 1            | 225   |
| 20:15       | 2     | 216             | 30          | 1     | 8             | 3             | 0             | 4             | 1             | 0             | 1            | 1            | 0            | 267   |
| 20:30       | 14    | 646             | 159         | 6     | 32            | 13            | 1             | 24            | 6             | 4             | 4            | 3            | 1            | 913   |
| 20:45       | 8     | 182             | 44          | 1     | 6             | 0             | 0             | 8             | 0             | 0             | 0            | 0            | 0            | 249   |
| 21:00       | 1     | 214             | 27          | 3     | 5             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 252   |
| 21:15       | 3     | 170             | 22          | 2     | 5             | 2             | 0             | 2             | 0             | 1             | 0            | 0            | 0            | 207   |
| 21:30       | 0     | 158             | 14          | 1     | 7             | 1             | 0             | 0             | 0             | 0             | 0            | 0            | 0            | 181   |
| 21:45       | 12    | 724             | 107         | 7     | 23            | 4             | 0             | 11            | 0             | 1             | 0            | 0            | 0            | 889   |
| 22:00       | 1     | 172             | 20          | 1     | 0             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 196   |
| 22:15       | 2     | 145             | 15          | 0     | 3             | 0             | 0             | 2             | 1             | 0             | 0            | 0            | 0            | 168   |
| 22:30       | 1     | 110             | 17          | 1     | 2             | 0             | 0             | 2             | 4             | 0             | 0            | 0            | 0            | 137   |
| 22:45       | 2     | 110             | 13          | 5     | 5             | 2             | 0             | 3             | 1             | 1             | 0            | 0            | 0            | 142   |
| 23:00       | 6     | 537             | 65          | 7     | 10            | 3             | 0             | 8             | 6             | 1             | 0            | 0            | 0            | 643   |
| 23:15       | 0     | 111             | 14          | 0     | 2             | 0             | 0             | 0             | 0             | 0             | 0            | 1            | 0            | 128   |
| 23:30       | 1     | 120             | 15          | 0     | 3             | 1             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 141   |
| 23:45       | 1     | 102             | 15          | 1     | 5             | 1             | 0             | 1             | 1             | 0             | 0            | 1            | 0            | 128   |
| 24:00       | 2     | 75              | 17          | 0     | 2             | 2             | 0             | 2             | 0             | 1             | 0            | 0            | 0            | 101   |
| 24:15       | 4     | 408             | 61          | 1     | 12            | 4             | 0             | 4             | 1             | 1             | 0            | 2            | 0            | 498   |
| 24:30       | 0     | 112             | 9           | 0     | 2             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 124   |
| 24:45       | 1     | 75              | 5           | 0     | 0             | 0             | 0             | 0             | 1             | 0             | 1            | 0            | 1            | 84    |
| 25:00       | 0     | 59              | 5           | 0     | 3             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 68    |
| 25:15       | 0     | 64              | 7           | 0     | 0             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 72    |
| 25:30       | 1     | 310             | 26          | 0     | 5             | 0             | 0             | 0             | 4             | 0             | 1            | 0            | 1            | 348   |
| 25:45       | 0     | 77              | 7           | 0     | 3             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 88    |
| 26:00       | 0     | 76              | 6           | 0     | 1             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 84    |
| 26:15       | 1     | 67              | 1           | 0     | 1             | 0             | 0             | 1             | 0             | 0             | 0            | 0            | 0            | 71    |
| 26:30       | 0     | 51              | 4           | 0     | 1             | 0             | 0             | 0             | 1             | 0             | 0            | 0            | 0            | 57    |
| 26:45       | 1     | 271             | 18          | 0     | 6             | 0             | 0             | 1             | 3             | 0             | 0            | 0            | 0            | 300   |
| Total       | 171   | 6366            | 1528        | 88    | 385           | 104           | 4             | 177           | 64            | 23            | 9            | 10           | 9            | 8938  |
| Percent     | 1.9%  | 71.2%           | 17.1%       | 1.0%  | 4.3%          | 1.2%          | 0.0%          | 2.0%          | 0.7%          | 0.3%          | 0.1%         | 0.1%         | 0.1%         |       |
| Grand Total | 242   | 10521           | 2548        | 146   | 641           | 171           | 5             | 273           | 135           | 30            | 13           | 11           | 21           | 14757 |
| Percent     | 1.6%  | 71.3%           | 17.3%       | 1.0%  | 4.3%          | 1.2%          | 0.0%          | 1.8%          | 0.9%          | 0.2%          | 0.1%         | 0.1%         | 0.1%         |       |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
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Page 1

Site Code: 13

Station ID: 13

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

NB

| Start Time | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 05/11/16   | 0       | 0        | 0        | 1        | 1        | 6        | 18       | 17       | 9        | 1        | 0        | 0        | 0        | 0         | 53    |
| 00:15      | 2       | 0        | 0        | 0        | 6        | 12       | 28       | 10       | 3        | 1        | 0        | 0        | 0        | 0         | 62    |
| 00:30      | 0       | 0        | 0        | 0        | 0        | 11       | 8        | 5        | 3        | 1        | 0        | 0        | 0        | 0         | 28    |
| 00:45      | 1       | 0        | 0        | 0        | 1        | 5        | 9        | 11       | 2        | 1        | 0        | 0        | 0        | 0         | 30    |
|            | 3       | 0        | 0        | 1        | 8        | 34       | 63       | 43       | 17       | 4        | 0        | 0        | 0        | 0         | 173   |
| 01:00      | 0       | 0        | 0        | 0        | 1        | 2        | 9        | 8        | 3        | 0        | 0        | 0        | 0        | 0         | 23    |
| 01:15      | 0       | 0        | 0        | 0        | 2        | 5        | 9        | 9        | 2        | 0        | 0        | 0        | 0        | 0         | 27    |
| 01:30      | 0       | 0        | 0        | 0        | 1        | 7        | 5        | 4        | 5        | 0        | 0        | 0        | 0        | 0         | 22    |
| 01:45      | 1       | 0        | 0        | 2        | 0        | 4        | 6        | 15       | 1        | 1        | 1        | 0        | 0        | 0         | 31    |
|            | 1       | 0        | 0        | 2        | 4        | 18       | 29       | 36       | 11       | 1        | 1        | 0        | 0        | 0         | 103   |
| 02:00      | 0       | 0        | 0        | 0        | 1        | 1        | 6        | 8        | 0        | 0        | 0        | 0        | 0        | 0         | 16    |
| 02:15      | 0       | 0        | 0        | 0        | 0        | 3        | 9        | 7        | 4        | 1        | 0        | 0        | 0        | 0         | 24    |
| 02:30      | 0       | 0        | 0        | 0        | 0        | 2        | 5        | 8        | 4        | 1        | 0        | 0        | 0        | 0         | 20    |
| 02:45      | 0       | 0        | 0        | 0        | 0        | 2        | 5        | 4        | 1        | 0        | 0        | 0        | 0        | 0         | 12    |
|            | 0       | 0        | 0        | 0        | 1        | 8        | 25       | 27       | 9        | 2        | 0        | 0        | 0        | 0         | 72    |
| 03:00      | 0       | 0        | 0        | 0        | 1        | 3        | 5        | 6        | 2        | 0        | 0        | 0        | 0        | 0         | 17    |
| 03:15      | 0       | 0        | 0        | 0        | 0        | 2        | 6        | 5        | 4        | 0        | 0        | 0        | 0        | 0         | 17    |
| 03:30      | 0       | 0        | 0        | 0        | 0        | 3        | 11       | 18       | 4        | 2        | 0        | 0        | 0        | 0         | 38    |
| 03:45      | 1       | 0        | 0        | 0        | 1        | 3        | 9        | 3        | 2        | 2        | 1        | 0        | 0        | 0         | 22    |
|            | 1       | 0        | 0        | 0        | 2        | 11       | 31       | 32       | 12       | 4        | 1        | 0        | 0        | 0         | 94    |
| 04:00      | 0       | 0        | 0        | 0        | 0        | 4        | 10       | 11       | 2        | 0        | 0        | 0        | 0        | 0         | 27    |
| 04:15      | 0       | 0        | 0        | 0        | 0        | 7        | 8        | 13       | 5        | 0        | 0        | 0        | 0        | 0         | 33    |
| 04:30      | 1       | 0        | 0        | 0        | 1        | 9        | 18       | 7        | 9        | 5        | 0        | 0        | 0        | 0         | 50    |
| 04:45      | 0       | 0        | 0        | 0        | 3        | 8        | 20       | 17       | 13       | 0        | 0        | 0        | 0        | 0         | 61    |
|            | 1       | 0        | 0        | 0        | 4        | 28       | 56       | 48       | 29       | 5        | 0        | 0        | 0        | 0         | 171   |
| 05:00      | 2       | 0        | 0        | 0        | 2        | 9        | 21       | 27       | 15       | 3        | 0        | 0        | 0        | 0         | 79    |
| 05:15      | 2       | 0        | 0        | 0        | 4        | 12       | 29       | 27       | 17       | 3        | 1        | 0        | 0        | 0         | 95    |
| 05:30      | 3       | 0        | 1        | 1        | 4        | 29       | 43       | 37       | 9        | 2        | 0        | 0        | 0        | 0         | 129   |
| 05:45      | 10      | 2        | 0        | 1        | 9        | 31       | 62       | 42       | 9        | 6        | 3        | 0        | 0        | 0         | 175   |
|            | 17      | 2        | 1        | 2        | 19       | 81       | 155      | 133      | 50       | 14       | 4        | 0        | 0        | 0         | 478   |
| 06:00      | 10      | 0        | 0        | 1        | 3        | 35       | 52       | 50       | 18       | 2        | 0        | 0        | 0        | 0         | 171   |
| 06:15      | 9       | 0        | 0        | 0        | 3        | 33       | 87       | 64       | 27       | 3        | 1        | 0        | 0        | 0         | 227   |
| 06:30      | 17      | 1        | 0        | 0        | 10       | 24       | 102      | 67       | 31       | 15       | 2        | 0        | 0        | 0         | 269   |
| 06:45      | 20      | 0        | 0        | 2        | 10       | 38       | 120      | 55       | 32       | 7        | 0        | 0        | 0        | 0         | 284   |
|            | 56      | 1        | 0        | 3        | 26       | 130      | 361      | 236      | 108      | 27       | 3        | 0        | 0        | 0         | 951   |
| 07:00      | 16      | 0        | 0        | 2        | 11       | 62       | 108      | 81       | 12       | 2        | 0        | 0        | 0        | 0         | 294   |
| 07:15      | 17      | 0        | 0        | 0        | 15       | 73       | 137      | 50       | 10       | 2        | 0        | 0        | 0        | 0         | 304   |
| 07:30      | 12      | 0        | 0        | 0        | 17       | 59       | 113      | 59       | 16       | 2        | 1        | 0        | 0        | 0         | 279   |
| 07:45      | 19      | 2        | 0        | 0        | 7        | 52       | 102      | 84       | 19       | 1        | 0        | 0        | 0        | 0         | 286   |
|            | 64      | 2        | 0        | 2        | 50       | 246      | 460      | 274      | 57       | 7        | 1        | 0        | 0        | 0         | 1163  |
| 08:00      | 12      | 1        | 1        | 3        | 11       | 38       | 93       | 83       | 13       | 5        | 1        | 0        | 0        | 0         | 261   |
| 08:15      | 26      | 0        | 0        | 5        | 10       | 52       | 89       | 63       | 19       | 1        | 0        | 0        | 0        | 0         | 265   |
| 08:30      | 11      | 1        | 0        | 3        | 15       | 54       | 112      | 54       | 6        | 3        | 0        | 0        | 0        | 0         | 259   |
| 08:45      | 13      | 1        | 2        | 2        | 6        | 46       | 85       | 50       | 22       | 5        | 0        | 0        | 0        | 0         | 232   |
|            | 62      | 3        | 3        | 13       | 42       | 190      | 379      | 250      | 60       | 14       | 1        | 0        | 0        | 0         | 1017  |
| 09:00      | 10      | 0        | 0        | 4        | 11       | 50       | 73       | 53       | 22       | 0        | 0        | 0        | 0        | 0         | 223   |
| 09:15      | 10      | 0        | 0        | 4        | 12       | 46       | 81       | 39       | 11       | 1        | 0        | 0        | 0        | 0         | 204   |
| 09:30      | 11      | 0        | 0        | 1        | 20       | 53       | 76       | 36       | 6        | 1        | 0        | 1        | 0        | 0         | 205   |
| 09:45      | 13      | 2        | 0        | 4        | 16       | 33       | 72       | 39       | 11       | 1        | 0        | 0        | 0        | 0         | 191   |
|            | 44      | 2        | 0        | 13       | 59       | 182      | 302      | 167      | 50       | 3        | 0        | 1        | 0        | 0         | 823   |
| 10:00      | 11      | 1        | 0        | 7        | 13       | 63       | 53       | 34       | 9        | 3        | 0        | 0        | 0        | 0         | 194   |
| 10:15      | 7       | 0        | 0        | 2        | 31       | 40       | 60       | 30       | 5        | 2        | 0        | 0        | 0        | 0         | 177   |
| 10:30      | 8       | 0        | 0        | 0        | 17       | 57       | 73       | 27       | 6        | 1        | 0        | 0        | 0        | 0         | 189   |
| 10:45      | 9       | 0        | 0        | 0        | 5        | 41       | 75       | 37       | 9        | 2        | 0        | 0        | 0        | 0         | 178   |
|            | 35      | 1        | 0        | 9        | 66       | 201      | 261      | 128      | 29       | 8        | 0        | 0        | 0        | 0         | 738   |
| 11:00      | 8       | 0        | 0        | 1        | 13       | 53       | 70       | 33       | 11       | 1        | 1        | 0        | 0        | 0         | 191   |
| 11:15      | 15      | 0        | 11       | 6        | 30       | 53       | 61       | 23       | 3        | 1        | 0        | 0        | 0        | 0         | 203   |
| 11:30      | 10      | 1        | 0        | 0        | 12       | 56       | 58       | 28       | 3        | 3        | 0        | 0        | 0        | 0         | 171   |
| 11:45      | 8       | 1        | 0        | 5        | 24       | 68       | 75       | 26       | 4        | 0        | 0        | 0        | 0        | 0         | 211   |
|            | 41      | 2        | 11       | 12       | 79       | 230      | 264      | 110      | 21       | 5        | 1        | 0        | 0        | 0         | 776   |
| Total      | 325     | 13       | 15       | 57       | 360      | 1359     | 2386     | 1484     | 453      | 94       | 12       | 1        | 0        | 0         | 6559  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 2

Site Code: 13

Station ID: 13

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

NB

| Start Time  | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |
|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 12 PM       | 12      | 1        | 2        | 3        | 22       | 72       | 60       | 28       | 1        | 1        | 0        | 0        | 0        | 0         | 202   |
| 12:15       | 9       | 0        | 0        | 5        | 21       | 68       | 88       | 24       | 2        | 0        | 0        | 0        | 0        | 0         | 217   |
| 12:30       | 7       | 0        | 0        | 1        | 15       | 55       | 79       | 33       | 9        | 0        | 0        | 0        | 0        | 0         | 199   |
| 12:45       | 4       | 0        | 0        | 1        | 18       | 62       | 85       | 28       | 9        | 2        | 1        | 0        | 0        | 0         | 210   |
|             | 32      | 1        | 2        | 10       | 76       | 257      | 312      | 113      | 21       | 3        | 1        | 0        | 0        | 0         | 828   |
| 13:00       | 7       | 0        | 0        | 2        | 18       | 50       | 79       | 25       | 6        | 0        | 0        | 0        | 0        | 0         | 187   |
| 13:15       | 11      | 0        | 0        | 3        | 14       | 68       | 65       | 28       | 4        | 0        | 0        | 0        | 0        | 0         | 193   |
| 13:30       | 11      | 0        | 2        | 0        | 30       | 71       | 62       | 17       | 2        | 0        | 1        | 1        | 0        | 0         | 197   |
| 13:45       | 9       | 0        | 0        | 4        | 12       | 58       | 82       | 23       | 5        | 0        | 0        | 0        | 0        | 0         | 193   |
|             | 38      | 0        | 2        | 9        | 74       | 247      | 288      | 93       | 17       | 0        | 1        | 1        | 0        | 0         | 770   |
| 14:00       | 13      | 0        | 1        | 3        | 26       | 74       | 66       | 32       | 6        | 1        | 0        | 0        | 0        | 0         | 222   |
| 14:15       | 14      | 1        | 0        | 3        | 28       | 84       | 77       | 22       | 6        | 0        | 0        | 0        | 0        | 0         | 235   |
| 14:30       | 7       | 1        | 0        | 4        | 17       | 68       | 86       | 25       | 10       | 1        | 0        | 0        | 0        | 0         | 219   |
| 14:45       | 10      | 3        | 3        | 4        | 30       | 72       | 77       | 17       | 2        | 0        | 0        | 0        | 0        | 0         | 218   |
|             | 44      | 5        | 4        | 14       | 101      | 298      | 306      | 96       | 24       | 2        | 0        | 0        | 0        | 0         | 894   |
| 15:00       | 11      | 0        | 0        | 3        | 13       | 62       | 76       | 30       | 14       | 0        | 0        | 0        | 0        | 0         | 209   |
| 15:15       | 6       | 1        | 1        | 1        | 24       | 61       | 76       | 38       | 12       | 0        | 0        | 0        | 0        | 0         | 220   |
| 15:30       | 13      | 0        | 1        | 2        | 13       | 56       | 97       | 22       | 0        | 0        | 0        | 0        | 0        | 0         | 204   |
| 15:45       | 12      | 0        | 2        | 7        | 22       | 75       | 80       | 13       | 2        | 0        | 0        | 0        | 0        | 0         | 213   |
|             | 42      | 1        | 4        | 13       | 72       | 254      | 329      | 103      | 28       | 0        | 0        | 0        | 0        | 0         | 846   |
| 16:00       | 14      | 0        | 0        | 4        | 20       | 120      | 81       | 19       | 5        | 0        | 0        | 0        | 0        | 0         | 263   |
| 16:15       | 9       | 0        | 0        | 2        | 23       | 76       | 116      | 15       | 1        | 0        | 0        | 0        | 0        | 0         | 242   |
| 16:30       | 11      | 0        | 0        | 0        | 35       | 96       | 59       | 8        | 0        | 0        | 0        | 0        | 0        | 0         | 209   |
| 16:45       | 7       | 0        | 0        | 6        | 32       | 89       | 69       | 22       | 1        | 0        | 0        | 0        | 0        | 0         | 226   |
|             | 41      | 0        | 0        | 12       | 110      | 381      | 325      | 64       | 7        | 0        | 0        | 0        | 0        | 0         | 940   |
| 17:00       | 11      | 0        | 0        | 6        | 34       | 95       | 90       | 25       | 0        | 0        | 0        | 0        | 0        | 0         | 261   |
| 17:15       | 16      | 0        | 0        | 3        | 27       | 72       | 87       | 21       | 0        | 0        | 0        | 0        | 0        | 0         | 226   |
| 17:30       | 9       | 0        | 0        | 7        | 21       | 73       | 88       | 22       | 0        | 1        | 0        | 0        | 0        | 0         | 221   |
| 17:45       | 14      | 0        | 0        | 0        | 13       | 76       | 93       | 20       | 0        | 2        | 0        | 0        | 0        | 0         | 218   |
|             | 50      | 0        | 0        | 16       | 95       | 316      | 358      | 88       | 0        | 3        | 0        | 0        | 0        | 0         | 926   |
| 18:00       | 9       | 0        | 0        | 0        | 17       | 68       | 83       | 28       | 4        | 0        | 0        | 0        | 0        | 0         | 209   |
| 18:15       | 14      | 0        | 0        | 6        | 18       | 58       | 77       | 18       | 2        | 0        | 0        | 0        | 0        | 0         | 193   |
| 18:30       | 9       | 0        | 0        | 5        | 13       | 91       | 69       | 13       | 2        | 0        | 0        | 0        | 0        | 0         | 202   |
| 18:45       | 6       | 0        | 0        | 0        | 14       | 81       | 68       | 13       | 3        | 0        | 0        | 0        | 0        | 0         | 185   |
|             | 38      | 0        | 0        | 11       | 62       | 298      | 297      | 72       | 11       | 0        | 0        | 0        | 0        | 0         | 789   |
| 19:00       | 11      | 0        | 0        | 1        | 15       | 66       | 71       | 23       | 5        | 0        | 0        | 0        | 0        | 0         | 192   |
| 19:15       | 9       | 1        | 0        | 0        | 14       | 74       | 62       | 26       | 3        | 1        | 0        | 0        | 0        | 0         | 190   |
| 19:30       | 4       | 0        | 0        | 0        | 3        | 54       | 95       | 21       | 8        | 2        | 1        | 0        | 0        | 0         | 188   |
| 19:45       | 5       | 0        | 0        | 1        | 9        | 51       | 58       | 18       | 10       | 0        | 0        | 0        | 0        | 0         | 152   |
|             | 29      | 1        | 0        | 2        | 41       | 245      | 286      | 88       | 26       | 3        | 1        | 0        | 0        | 0         | 722   |
| 20:00       | 2       | 0        | 0        | 0        | 6        | 40       | 61       | 38       | 5        | 2        | 1        | 0        | 0        | 0         | 155   |
| 20:15       | 3       | 0        | 0        | 0        | 13       | 40       | 62       | 37       | 6        | 1        | 0        | 0        | 0        | 0         | 162   |
| 20:30       | 6       | 0        | 0        | 1        | 3        | 26       | 55       | 36       | 6        | 0        | 0        | 0        | 0        | 0         | 133   |
| 20:45       | 6       | 2        | 0        | 6        | 12       | 34       | 47       | 21       | 3        | 2        | 0        | 0        | 0        | 0         | 133   |
|             | 17      | 2        | 0        | 7        | 34       | 140      | 225      | 132      | 20       | 5        | 1        | 0        | 0        | 0         | 583   |
| 21:00       | 4       | 0        | 0        | 2        | 14       | 45       | 71       | 26       | 1        | 2        | 0        | 0        | 0        | 0         | 165   |
| 21:15       | 3       | 0        | 0        | 0        | 2        | 31       | 72       | 22       | 4        | 2        | 0        | 0        | 0        | 0         | 136   |
| 21:30       | 5       | 0        | 0        | 2        | 7        | 34       | 51       | 28       | 3        | 1        | 0        | 0        | 0        | 0         | 131   |
| 21:45       | 1       | 0        | 0        | 0        | 4        | 21       | 44       | 14       | 7        | 1        | 0        | 0        | 0        | 0         | 92    |
|             | 13      | 0        | 0        | 4        | 27       | 131      | 238      | 90       | 15       | 6        | 0        | 0        | 0        | 0         | 524   |
| 22:00       | 3       | 0        | 0        | 0        | 6        | 24       | 38       | 11       | 6        | 0        | 0        | 0        | 0        | 0         | 88    |
| 22:15       | 3       | 0        | 0        | 0        | 6        | 18       | 34       | 21       | 5        | 0        | 0        | 0        | 0        | 0         | 87    |
| 22:30       | 3       | 0        | 0        | 0        | 7        | 17       | 32       | 25       | 6        | 0        | 0        | 0        | 0        | 0         | 90    |
| 22:45       | 1       | 0        | 0        | 0        | 3        | 20       | 28       | 15       | 2        | 1        | 0        | 0        | 0        | 0         | 70    |
|             | 10      | 0        | 0        | 0        | 22       | 79       | 132      | 72       | 19       | 1        | 0        | 0        | 0        | 0         | 335   |
| 23:00       | 0       | 0        | 0        | 0        | 1        | 11       | 23       | 20       | 4        | 0        | 0        | 0        | 0        | 0         | 59    |
| 23:15       | 0       | 0        | 0        | 0        | 2        | 12       | 24       | 11       | 2        | 1        | 0        | 0        | 0        | 0         | 52    |
| 23:30       | 0       | 0        | 0        | 0        | 1        | 9        | 19       | 20       | 3        | 0        | 0        | 0        | 0        | 0         | 52    |
| 23:45       | 1       | 0        | 0        | 0        | 4        | 15       | 18       | 9        | 3        | 1        | 0        | 0        | 0        | 0         | 51    |
|             | 1       | 0        | 0        | 0        | 8        | 47       | 84       | 60       | 12       | 2        | 0        | 0        | 0        | 0         | 214   |
| Total       | 355     | 10       | 12       | 98       | 722      | 2693     | 3180     | 1071     | 200      | 25       | 4        | 1        | 0        | 0         | 8371  |
| Grand Total | 680     | 23       | 27       | 155      | 1082     | 4052     | 5566     | 2555     | 653      | 119      | 16       | 2        | 0        | 0         | 14930 |

15th Percentile : 35 MPH  
50th Percentile : 41 MPH  
85th Percentile : 47 MPH  
95th Percentile : 50 MPH

Stats

Mean Speed(Average) : 41 MPH  
10 MPH Pace Speed : 36-45 MPH  
Number in Pace : 9618

|                                |       |
|--------------------------------|-------|
| Percent in Pace :              | 64.4% |
| Number of Vehicles > 55 MPH :  | 137   |
| Percent of Vehicles > 55 MPH : | 0.9%  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 1

Site Code: 13.5

Station ID: 13.5

MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

SB

| Start Time | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 05/11/16   | 0       | 0        | 0        | 0        | 3        | 12       | 16       | 7        | 2        | 0        | 0        | 0        | 0        | 0         | 40    |
| 00:15      | 0       | 0        | 0        | 0        | 7        | 12       | 17       | 3        | 2        | 0        | 0        | 0        | 0        | 0         | 41    |
| 00:30      | 0       | 0        | 0        | 0        | 4        | 11       | 12       | 4        | 0        | 0        | 0        | 0        | 0        | 0         | 31    |
| 00:45      | 1       | 0        | 0        | 0        | 1        | 15       | 15       | 9        | 4        | 0        | 0        | 0        | 0        | 0         | 45    |
| 01:00      | 1       | 0        | 0        | 0        | 15       | 50       | 60       | 23       | 8        | 0        | 0        | 0        | 0        | 0         | 157   |
| 01:15      | 0       | 0        | 0        | 0        | 1        | 8        | 16       | 7        | 1        | 0        | 0        | 0        | 0        | 0         | 33    |
| 01:30      | 0       | 0        | 0        | 0        | 1        | 12       | 11       | 8        | 0        | 2        | 0        | 0        | 0        | 0         | 34    |
| 01:45      | 0       | 0        | 0        | 0        | 1        | 8        | 6        | 4        | 1        | 0        | 0        | 0        | 0        | 0         | 20    |
| 02:00      | 0       | 0        | 0        | 0        | 3        | 6        | 3        | 7        | 0        | 0        | 0        | 0        | 0        | 0         | 19    |
| 02:15      | 0       | 0        | 0        | 0        | 6        | 34       | 36       | 26       | 2        | 2        | 0        | 0        | 0        | 0         | 106   |
| 02:30      | 0       | 0        | 0        | 0        | 0        | 15       | 11       | 8        | 1        | 1        | 1        | 0        | 0        | 0         | 37    |
| 02:45      | 0       | 0        | 0        | 0        | 2        | 5        | 5        | 1        | 2        | 0        | 0        | 0        | 0        | 0         | 15    |
| 03:00      | 0       | 0        | 0        | 0        | 2        | 6        | 6        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 14    |
| 03:15      | 0       | 0        | 0        | 0        | 4        | 5        | 8        | 3        | 2        | 0        | 0        | 0        | 0        | 0         | 22    |
| 03:30      | 0       | 0        | 0        | 0        | 8        | 31       | 30       | 12       | 5        | 1        | 1        | 0        | 0        | 0         | 88    |
| 03:45      | 1       | 0        | 0        | 0        | 0        | 6        | 11       | 7        | 0        | 0        | 0        | 0        | 0        | 0         | 25    |
| 04:00      | 0       | 0        | 2        | 0        | 1        | 7        | 5        | 1        | 3        | 0        | 0        | 0        | 0        | 0         | 19    |
| 04:15      | 0       | 0        | 0        | 0        | 2        | 5        | 9        | 2        | 1        | 0        | 0        | 0        | 0        | 0         | 19    |
| 04:30      | 0       | 0        | 0        | 0        | 1        | 2        | 12       | 3        | 1        | 0        | 0        | 0        | 0        | 0         | 19    |
| 04:45      | 1       | 0        | 2        | 0        | 4        | 20       | 37       | 13       | 5        | 0        | 0        | 0        | 0        | 0         | 82    |
| 05:00      | 0       | 0        | 0        | 0        | 3        | 13       | 7        | 1        | 1        | 0        | 0        | 0        | 0        | 0         | 25    |
| 05:15      | 0       | 0        | 0        | 0        | 3        | 6        | 12       | 4        | 0        | 1        | 0        | 0        | 0        | 0         | 26    |
| 05:30      | 1       | 0        | 0        | 0        | 2        | 13       | 18       | 6        | 3        | 0        | 0        | 0        | 0        | 0         | 43    |
| 05:45      | 0       | 0        | 0        | 0        | 2        | 13       | 18       | 16       | 5        | 3        | 0        | 0        | 0        | 0         | 57    |
| 06:00      | 1       | 0        | 0        | 0        | 10       | 45       | 55       | 27       | 9        | 4        | 0        | 0        | 0        | 0         | 151   |
| 06:15      | 0       | 0        | 0        | 1        | 4        | 16       | 23       | 15       | 1        | 0        | 0        | 0        | 0        | 0         | 60    |
| 06:30      | 0       | 0        | 0        | 0        | 4        | 16       | 35       | 17       | 1        | 0        | 0        | 0        | 0        | 0         | 73    |
| 06:45      | 1       | 0        | 0        | 0        | 3        | 26       | 49       | 8        | 2        | 1        | 0        | 0        | 0        | 0         | 90    |
| 07:00      | 2       | 0        | 0        | 0        | 7        | 30       | 33       | 25       | 4        | 1        | 0        | 0        | 0        | 0         | 102   |
| 07:15      | 3       | 0        | 0        | 1        | 18       | 88       | 140      | 65       | 8        | 2        | 0        | 0        | 0        | 0         | 325   |
| 07:30      | 2       | 0        | 2        | 2        | 7        | 41       | 46       | 19       | 6        | 3        | 1        | 0        | 0        | 0         | 129   |
| 07:45      | 3       | 0        | 1        | 4        | 13       | 35       | 49       | 24       | 8        | 2        | 0        | 0        | 0        | 0         | 139   |
| 08:00      | 5       | 1        | 9        | 15       | 31       | 57       | 44       | 14       | 9        | 1        | 0        | 0        | 0        | 0         | 186   |
| 08:15      | 20      | 4        | 7        | 17       | 37       | 49       | 32       | 20       | 5        | 1        | 1        | 0        | 0        | 0         | 193   |
| 08:30      | 30      | 5        | 19       | 38       | 88       | 182      | 171      | 77       | 28       | 7        | 2        | 0        | 0        | 0         | 647   |
| 08:45      | 35      | 12       | 29       | 35       | 29       | 45       | 24       | 6        | 3        | 0        | 0        | 0        | 0        | 0         | 218   |
| 09:00      | 28      | 16       | 23       | 34       | 37       | 40       | 24       | 9        | 1        | 0        | 0        | 0        | 0        | 0         | 212   |
| 09:15      | 59      | 28       | 55       | 23       | 25       | 13       | 9        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 212   |
| 09:30      | 52      | 14       | 26       | 27       | 41       | 36       | 28       | 2        | 2        | 2        | 1        | 0        | 0        | 0         | 231   |
| 09:45      | 174     | 70       | 133      | 119      | 132      | 134      | 85       | 17       | 6        | 2        | 1        | 0        | 0        | 0         | 873   |
| 10:00      | 25      | 16       | 15       | 33       | 52       | 59       | 28       | 20       | 4        | 1        | 0        | 0        | 0        | 0         | 253   |
| 10:15      | 63      | 29       | 40       | 35       | 30       | 16       | 7        | 2        | 1        | 0        | 0        | 0        | 0        | 0         | 223   |
| 10:30      | 59      | 19       | 30       | 46       | 33       | 20       | 16       | 3        | 1        | 0        | 0        | 0        | 0        | 0         | 227   |
| 10:45      | 25      | 11       | 15       | 28       | 50       | 42       | 35       | 8        | 0        | 0        | 1        | 0        | 0        | 0         | 215   |
| 11:00      | 172     | 75       | 100      | 142      | 165      | 137      | 86       | 33       | 6        | 1        | 1        | 0        | 0        | 0         | 918   |
| 11:15      | 5       | 5        | 12       | 29       | 49       | 55       | 35       | 22       | 6        | 0        | 0        | 0        | 0        | 0         | 218   |
| 11:30      | 49      | 14       | 14       | 27       | 45       | 35       | 22       | 12       | 3        | 1        | 0        | 0        | 0        | 0         | 222   |
| 11:45      | 18      | 8        | 15       | 18       | 41       | 63       | 49       | 19       | 4        | 0        | 0        | 0        | 0        | 0         | 235   |
| 12:00      | 13      | 5        | 14       | 31       | 54       | 46       | 39       | 9        | 3        | 0        | 0        | 0        | 0        | 0         | 214   |
| 12:15      | 85      | 32       | 55       | 105      | 189      | 199      | 145      | 62       | 16       | 1        | 0        | 0        | 0        | 0         | 889   |
| 12:30      | 3       | 0        | 0        | 6        | 29       | 72       | 58       | 31       | 5        | 1        | 0        | 0        | 0        | 0         | 205   |
| 12:45      | 8       | 0        | 2        | 17       | 40       | 50       | 42       | 14       | 6        | 3        | 0        | 0        | 0        | 0         | 182   |
| 13:00      | 6       | 3        | 4        | 9        | 45       | 63       | 48       | 16       | 6        | 2        | 0        | 0        | 0        | 0         | 202   |
| 13:15      | 19      | 1        | 9        | 22       | 40       | 54       | 29       | 13       | 4        | 1        | 1        | 0        | 0        | 0         | 193   |
| 13:30      | 36      | 4        | 15       | 54       | 154      | 239      | 177      | 74       | 21       | 7        | 1        | 0        | 0        | 0         | 782   |
| 13:45      | 7       | 0        | 2        | 6        | 32       | 75       | 46       | 23       | 4        | 1        | 0        | 0        | 0        | 0         | 196   |
| 14:00      | 17      | 4        | 8        | 22       | 36       | 53       | 41       | 16       | 5        | 0        | 0        | 0        | 0        | 0         | 202   |
| 14:15      | 19      | 9        | 20       | 38       | 42       | 62       | 17       | 14       | 1        | 0        | 0        | 0        | 0        | 0         | 222   |
| 14:30      | 14      | 3        | 5        | 19       | 50       | 62       | 40       | 9        | 0        | 0        | 0        | 0        | 0        | 0         | 202   |
| 14:45      | 57      | 16       | 35       | 85       | 160      | 252      | 144      | 62       | 10       | 1        | 0        | 0        | 0        | 0         | 822   |
| Total      | 560     | 202      | 359      | 544      | 949      | 1411     | 1166     | 491      | 124      | 28       | 6        | 0        | 0        | 0         | 5840  |

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Page 2

Site Code: 13.5  
Station ID: 13.5  
MT IND. BLVD NORTH OF HUGH HOWELL ROAD

Latitude: 0' 0.0000 Undefined

SB

| Start Time  | 1<br>15 | 16<br>20 | 21<br>25 | 26<br>30 | 31<br>35 | 36<br>40 | 41<br>45 | 46<br>50 | 51<br>55 | 56<br>60 | 61<br>65 | 66<br>70 | 71<br>75 | 76<br>999 | Total |
|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 12 PM       | 26      | 3        | 5        | 15       | 30       | 54       | 45       | 19       | 5        | 2        | 0        | 0        | 1        | 3         | 208   |
| 12:15       | 23      | 17       | 23       | 22       | 41       | 48       | 22       | 21       | 6        | 6        | 5        | 3        | 2        | 4         | 243   |
| 12:30       | 18      | 19       | 22       | 24       | 38       | 33       | 19       | 17       | 15       | 8        | 5        | 1        | 0        | 2         | 221   |
| 12:45       | 21      | 13       | 21       | 25       | 31       | 18       | 18       | 20       | 19       | 11       | 2        | 2        | 0        | 2         | 203   |
|             | 88      | 52       | 71       | 86       | 140      | 153      | 104      | 77       | 45       | 27       | 12       | 6        | 3        | 11        | 875   |
| 13:00       | 22      | 17       | 18       | 28       | 27       | 22       | 15       | 20       | 15       | 3        | 4        | 1        | 1        | 2         | 195   |
| 13:15       | 25      | 23       | 21       | 31       | 29       | 21       | 25       | 19       | 17       | 8        | 3        | 0        | 4        | 4         | 230   |
| 13:30       | 52      | 25       | 25       | 34       | 34       | 22       | 10       | 6        | 3        | 1        | 0        | 0        | 0        | 0         | 212   |
| 13:45       | 17      | 4        | 12       | 22       | 37       | 53       | 38       | 10       | 4        | 1        | 0        | 0        | 0        | 0         | 198   |
|             | 116     | 69       | 76       | 115      | 127      | 118      | 88       | 55       | 39       | 13       | 7        | 1        | 5        | 6         | 835   |
| 14:00       | 33      | 7        | 25       | 30       | 48       | 56       | 36       | 17       | 1        | 0        | 0        | 0        | 0        | 0         | 253   |
| 14:15       | 63      | 18       | 26       | 41       | 29       | 15       | 11       | 3        | 0        | 0        | 0        | 0        | 0        | 0         | 206   |
| 14:30       | 23      | 10       | 12       | 21       | 42       | 66       | 38       | 21       | 3        | 1        | 0        | 0        | 0        | 0         | 237   |
| 14:45       | 37      | 19       | 34       | 37       | 47       | 36       | 19       | 3        | 1        | 0        | 0        | 0        | 0        | 0         | 233   |
|             | 156     | 54       | 97       | 129      | 166      | 173      | 104      | 44       | 5        | 1        | 0        | 0        | 0        | 0         | 929   |
| 15:00       | 18      | 6        | 17       | 52       | 50       | 57       | 27       | 13       | 3        | 0        | 0        | 0        | 0        | 0         | 243   |
| 15:15       | 70      | 20       | 26       | 39       | 28       | 27       | 19       | 7        | 2        | 0        | 1        | 0        | 0        | 0         | 239   |
| 15:30       | 81      | 47       | 49       | 34       | 21       | 20       | 3        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 255   |
| 15:45       | 56      | 26       | 43       | 29       | 34       | 37       | 20       | 5        | 0        | 0        | 0        | 0        | 0        | 0         | 250   |
|             | 225     | 99       | 135      | 154      | 133      | 141      | 69       | 25       | 5        | 0        | 1        | 0        | 0        | 0         | 987   |
| 16:00       | 93      | 35       | 53       | 47       | 19       | 13       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 260   |
| 16:15       | 97      | 40       | 34       | 14       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 185   |
| 16:30       | 90      | 57       | 51       | 19       | 4        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 221   |
| 16:45       | 90      | 43       | 51       | 14       | 3        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 201   |
|             | 370     | 175      | 189      | 94       | 26       | 13       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 867   |
| 17:00       | 100     | 43       | 50       | 18       | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 212   |
| 17:15       | 82      | 43       | 74       | 26       | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 227   |
| 17:30       | 103     | 51       | 47       | 8        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 209   |
| 17:45       | 106     | 39       | 54       | 11       | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 212   |
|             | 391     | 176      | 225      | 63       | 5        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 860   |
| 18:00       | 110     | 46       | 38       | 8        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 202   |
| 18:15       | 100     | 55       | 40       | 18       | 2        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 216   |
| 18:30       | 92      | 32       | 53       | 33       | 13       | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 224   |
| 18:45       | 46      | 28       | 32       | 60       | 44       | 38       | 16       | 2        | 1        | 0        | 0        | 0        | 0        | 0         | 267   |
|             | 348     | 161      | 163      | 119      | 59       | 40       | 16       | 2        | 1        | 0        | 0        | 0        | 0        | 0         | 909   |
| 19:00       | 70      | 30       | 52       | 35       | 38       | 18       | 7        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 250   |
| 19:15       | 8       | 4        | 19       | 42       | 67       | 60       | 33       | 18       | 2        | 0        | 0        | 0        | 0        | 0         | 253   |
| 19:30       | 14      | 5        | 6        | 20       | 46       | 60       | 33       | 20       | 2        | 1        | 0        | 0        | 0        | 0         | 207   |
| 19:45       | 5       | 0        | 4        | 7        | 38       | 53       | 54       | 15       | 5        | 1        | 0        | 0        | 0        | 0         | 182   |
|             | 97      | 39       | 81       | 104      | 189      | 191      | 127      | 53       | 9        | 2        | 0        | 0        | 0        | 0         | 892   |
| 20:00       | 4       | 0        | 3        | 17       | 41       | 72       | 46       | 11       | 2        | 1        | 0        | 0        | 0        | 0         | 197   |
| 20:15       | 0       | 0        | 1        | 14       | 31       | 49       | 50       | 14       | 6        | 2        | 1        | 0        | 0        | 0         | 168   |
| 20:30       | 1       | 0        | 1        | 1        | 17       | 45       | 44       | 20       | 7        | 1        | 0        | 0        | 0        | 0         | 137   |
| 20:45       | 7       | 1        | 2        | 11       | 38       | 38       | 32       | 12       | 1        | 1        | 0        | 0        | 0        | 0         | 143   |
|             | 12      | 1        | 7        | 43       | 127      | 204      | 172      | 57       | 16       | 5        | 1        | 0        | 0        | 0         | 645   |
| 21:00       | 1       | 0        | 2        | 7        | 29       | 33       | 41       | 12       | 4        | 0        | 0        | 0        | 0        | 0         | 129   |
| 21:15       | 1       | 0        | 0        | 4        | 18       | 57       | 37       | 18       | 4        | 2        | 0        | 0        | 0        | 0         | 141   |
| 21:30       | 0       | 0        | 0        | 4        | 25       | 45       | 35       | 16       | 3        | 0        | 0        | 0        | 0        | 0         | 128   |
| 21:45       | 1       | 0        | 2        | 3        | 17       | 39       | 29       | 9        | 1        | 0        | 0        | 0        | 0        | 0         | 101   |
|             | 3       | 0        | 4        | 18       | 89       | 174      | 142      | 55       | 12       | 2        | 0        | 0        | 0        | 0         | 499   |
| 22:00       | 3       | 0        | 0        | 5        | 16       | 42       | 42       | 12       | 4        | 0        | 0        | 0        | 0        | 0         | 124   |
| 22:15       | 0       | 0        | 0        | 0        | 1        | 21       | 45       | 12       | 4        | 1        | 0        | 0        | 0        | 0         | 84    |
| 22:30       | 0       | 0        | 0        | 0        | 9        | 24       | 24       | 10       | 1        | 0        | 0        | 0        | 0        | 0         | 68    |
| 22:45       | 2       | 0        | 0        | 0        | 7        | 22       | 23       | 14       | 5        | 0        | 0        | 0        | 0        | 0         | 73    |
|             | 5       | 0        | 0        | 5        | 33       | 109      | 134      | 48       | 14       | 1        | 0        | 0        | 0        | 0         | 349   |
| 23:00       | 0       | 0        | 0        | 2        | 11       | 31       | 26       | 14       | 4        | 0        | 0        | 0        | 0        | 0         | 88    |
| 23:15       | 0       | 0        | 0        | 0        | 2        | 32       | 27       | 20       | 3        | 0        | 0        | 0        | 0        | 0         | 84    |
| 23:30       | 1       | 0        | 0        | 1        | 5        | 21       | 22       | 16       | 4        | 1        | 0        | 0        | 0        | 0         | 71    |
| 23:45       | 0       | 0        | 0        | 1        | 2        | 15       | 23       | 10       | 4        | 1        | 0        | 1        | 0        | 0         | 57    |
|             | 1       | 0        | 0        | 4        | 20       | 99       | 98       | 60       | 15       | 2        | 0        | 1        | 0        | 0         | 300   |
| Total       | 1812    | 826      | 1048     | 934      | 1114     | 1415     | 1054     | 476      | 161      | 53       | 21       | 8        | 8        | 17        | 8947  |
| Grand Total | 2372    | 1028     | 1407     | 1478     | 2063     | 2826     | 2220     | 967      | 285      | 81       | 27       | 8        | 8        | 17        | 14787 |

15th Percentile : 14 MPH  
50th Percentile : 32 MPH  
85th Percentile : 43 MPH  
95th Percentile : 48 MPH

Stats Mean Speed(Average) : 31 MPH  
10 MPH Pace Speed : 36-45 MPH  
Number in Pace : 5046

|                                |       |
|--------------------------------|-------|
| Percent in Pace :              | 34.2% |
| Number of Vehicles > 55 MPH :  | 141   |
| Percent of Vehicles > 55 MPH : | 1.0%  |



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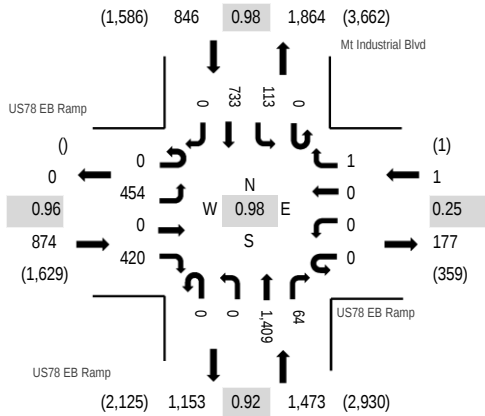
Location: 1 Mt Industrial Blvd & US78 EB Ramp AM

Date and Start Time: Wednesday, May 11, 2016

Peak Hour: 07:30 AM - 08:30 AM

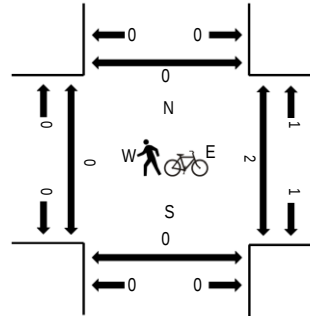
Peak 15-Minutes: 07:30 AM - 07:45 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | US78 EB Ramp<br>Eastbound |      |      |       | US78 EB Ramp<br>Westbound |      |      |       | Mt Industrial Blvd<br>Northbound |      |      |       | Mt Industrial Blvd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|---------------------------|------|------|-------|---------------------------|------|------|-------|----------------------------------|------|------|-------|----------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                    | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                           | Left | Thru | Right | U-Turn                           | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                         | 99   | 0    | 65    | 0                         | 0    | 0    | 0     | 0                                | 0    | 364  | 7     | 0                                | 15   | 120  | 0     | 670   | 3,076           | 1                    | 2    | 0     | 0     |
| 7:15 AM                | 0                         | 97   | 0    | 95    | 0                         | 0    | 0    | 0     | 0                                | 0    | 419  | 13    | 0                                | 32   | 130  | 0     | 786   | 3,181           | 1                    | 0    | 0     | 0     |
| 7:30 AM                | 0                         | 111  | 0    | 97    | 0                         | 0    | 0    | 0     | 0                                | 0    | 399  | 18    | 0                                | 31   | 161  | 0     | 817   | 3,194           | 0                    | 2    | 0     | 0     |
| 7:45 AM                | 0                         | 113  | 0    | 115   | 0                         | 0    | 0    | 0     | 0                                | 0    | 348  | 18    | 0                                | 29   | 180  | 0     | 803   | 3,159           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                         | 119  | 0    | 89    | 0                         | 0    | 0    | 1     | 0                                | 0    | 323  | 18    | 0                                | 29   | 196  | 0     | 775   | 3,070           | 0                    | 0    | 0     | 0     |
| 8:15 AM                | 0                         | 111  | 0    | 119   | 0                         | 0    | 0    | 0     | 0                                | 0    | 339  | 10    | 0                                | 24   | 196  | 0     | 799   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                         | 115  | 0    | 98    | 0                         | 0    | 0    | 0     | 0                                | 0    | 322  | 21    | 0                                | 34   | 192  | 0     | 782   |                 | 0                    | 1    | 0     | 0     |
| 8:45 AM                | 0                         | 95   | 0    | 91    | 0                         | 0    | 0    | 0     | 0                                | 0    | 287  | 24    | 0                                | 36   | 181  | 0     | 714   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |       |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|-------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru  | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 8    | 0    | 17    | 0         | 0    | 0    | 0     | 0          | 0    | 21    | 1     | 0          | 1    | 10   | 0     | 58    |
| Lights             | 0         | 433  | 0    | 377   | 0         | 0    | 0    | 1     | 0          | 0    | 1,339 | 58    | 0          | 103  | 686  | 0     | 2,997 |
| Mediums            | 0         | 13   | 0    | 26    | 0         | 0    | 0    | 0     | 0          | 0    | 49    | 5     | 0          | 9    | 37   | 0     | 139   |
| Total              | 0         | 454  | 0    | 420   | 0         | 0    | 0    | 1     | 0          | 0    | 1,409 | 64    | 0          | 113  | 733  | 0     | 3,194 |



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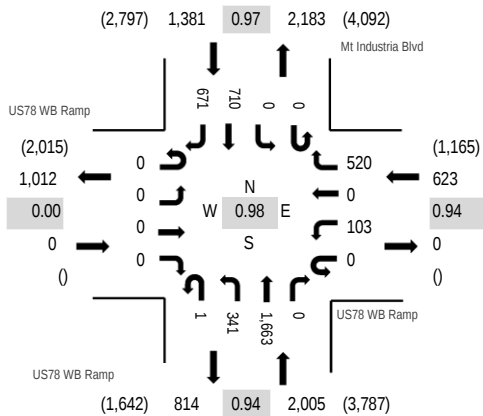
**Location:** 1 Mt Industrial Blvd & US78 WB Ramp AM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 07:15 AM - 08:15 AM

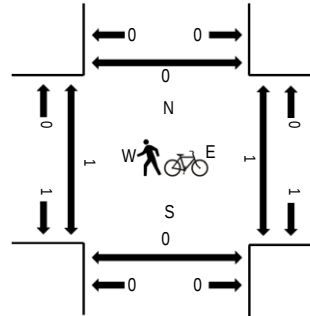
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | US78 WB Ramp<br>Eastbound |      |      |       | US78 WB Ramp<br>Westbound |      |      |       | Mt Industrial Blvd<br>Northbound |      |      |       | Mt Industria Blvd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrain Crossings |      |       |       |
|------------------------|---------------------------|------|------|-------|---------------------------|------|------|-------|----------------------------------|------|------|-------|---------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                    | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                           | Left | Thru | Right | U-Turn                          | Left | Thru | Right |       |                 | West                 | East | South | North |
|                        |                           |      |      |       |                           |      |      |       |                                  |      |      |       |                                 |      |      |       |       |                 |                      |      |       |       |
| 7:00 AM                | 0                         | 0    | 0    | 0     | 0                         | 28   | 0    | 125   | 0                                | 57   | 407  | 0     | 0                               | 0    | 122  | 169   | 908   | 3,935           | 0                    | 2    | 0     | 0     |
| 7:15 AM                | 0                         | 0    | 0    | 0     | 0                         | 22   | 0    | 103   | 0                                | 104  | 430  | 0     | 0                               | 0    | 158  | 168   | 985   | 4,009           | 1                    | 0    | 0     | 0     |
| 7:30 AM                | 0                         | 0    | 0    | 0     | 0                         | 27   | 0    | 139   | 0                                | 87   | 439  | 0     | 0                               | 0    | 180  | 155   | 1,027 | 3,997           | 0                    | 1    | 0     | 0     |
| 7:45 AM                | 0                         | 0    | 0    | 0     | 0                         | 27   | 0    | 142   | 1                                | 80   | 403  | 0     | 0                               | 0    | 186  | 176   | 1,015 | 3,938           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                         | 0    | 0    | 0     | 0                         | 27   | 0    | 136   | 0                                | 70   | 391  | 0     | 0                               | 0    | 186  | 172   | 982   | 3,814           | 0                    | 0    | 0     | 0     |
| 8:15 AM                | 0                         | 0    | 0    | 0     | 0                         | 31   | 0    | 107   | 0                                | 76   | 385  | 0     | 0                               | 0    | 192  | 182   | 973   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                         | 0    | 0    | 0     | 0                         | 32   | 0    | 101   | 0                                | 80   | 372  | 0     | 0                               | 0    | 196  | 187   | 968   |                 | 0                    | 2    | 0     | 0     |
| 8:45 AM                | 0                         | 0    | 0    | 0     | 0                         | 29   | 0    | 89    | 0                                | 82   | 323  | 0     | 0                               | 0    | 198  | 170   | 891   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |       |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|-------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru  | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 0    | 1     | 0          | 10   | 21    | 0     | 0          | 0    | 6    | 20    | 58    |
| Lights             | 0         | 0    | 0    | 0     | 0         | 101  | 0    | 507   | 1          | 314  | 1,580 | 0     | 0          | 0    | 670  | 613   | 3,786 |
| Mediums            | 0         | 0    | 0    | 0     | 0         | 2    | 0    | 12    | 0          | 17   | 62    | 0     | 0          | 0    | 34   | 38    | 165   |
| Total              | 0         | 0    | 0    | 0     | 0         | 103  | 0    | 520   | 1          | 341  | 1,663 | 0     | 0          | 0    | 710  | 671   | 4,009 |



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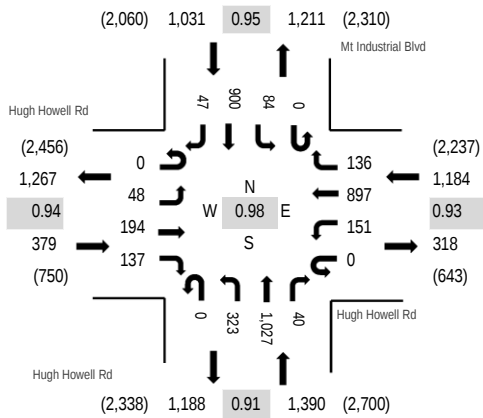
**Location:** 3 Mt Industrial Blvd & Hugh Howell Rd AM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 07:15 AM - 08:15 AM

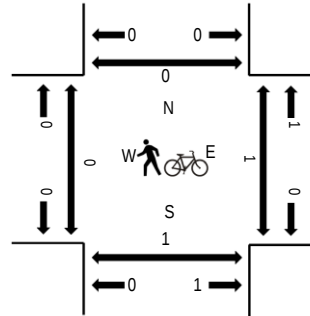
**Peak 15-Minutes:** 07:15 AM - 07:30 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd Eastbound |      |      |       | Hugh Howell Rd Westbound |      |      |       | Mt Industrial Blvd Northbound |      |      |       | Mt Industrial Blvd Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|--------------------------|------|------|-------|--------------------------|------|------|-------|-------------------------------|------|------|-------|-------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                   | Left | Thru | Right | U-Turn                   | Left | Thru | Right | U-Turn                        | Left | Thru | Right | U-Turn                        | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                        | 9    | 26   | 10    | 0                        | 41   | 241  | 40    | 0                             | 83   | 254  | 9     | 0                             | 17   | 216  | 11    | 957   | 3,983           | 0                    | 0    | 0     | 1     |
| 7:15 AM                | 0                        | 14   | 30   | 24    | 0                        | 42   | 248  | 42    | 0                             | 86   | 295  | 9     | 0                             | 18   | 201  | 7     | 1,016 | 3,984           | 0                    | 0    | 1     | 0     |
| 7:30 AM                | 0                        | 5    | 44   | 37    | 0                        | 33   | 235  | 27    | 0                             | 83   | 257  | 9     | 0                             | 28   | 236  | 13    | 1,007 | 3,956           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                        | 17   | 61   | 41    | 0                        | 41   | 213  | 38    | 0                             | 78   | 248  | 8     | 0                             | 21   | 230  | 7     | 1,003 | 3,898           | 0                    | 1    | 0     | 0     |
| 8:00 AM                | 0                        | 12   | 59   | 35    | 0                        | 35   | 201  | 29    | 0                             | 76   | 227  | 14    | 0                             | 17   | 233  | 20    | 958   | 3,764           | 0                    | 0    | 0     | 0     |
| 8:15 AM                | 0                        | 11   | 64   | 41    | 0                        | 26   | 219  | 22    | 0                             | 82   | 248  | 11    | 0                             | 19   | 226  | 19    | 988   |                 | 1                    | 1    | 0     | 1     |
| 8:30 AM                | 0                        | 9    | 65   | 34    | 0                        | 34   | 179  | 33    | 0                             | 79   | 224  | 9     | 0                             | 22   | 246  | 15    | 949   |                 | 0                    | 0    | 0     | 1     |
| 8:45 AM                | 0                        | 15   | 50   | 37    | 0                        | 31   | 158  | 29    | 0                             | 89   | 205  | 17    | 0                             | 16   | 208  | 14    | 869   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |       |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|-------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru  | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 2     | 0         | 0    | 1    | 0     | 0          | 5    | 16    | 0     | 0          | 0    | 14   | 2     | 40    |
| Lights             | 0         | 41   | 186  | 130   | 0         | 148  | 880  | 135   | 0          | 301  | 979   | 38    | 0          | 79   | 849  | 39    | 3,805 |
| Mediums            | 0         | 7    | 8    | 5     | 0         | 3    | 16   | 1     | 0          | 17   | 32    | 2     | 0          | 5    | 37   | 6     | 139   |
| Total              | 0         | 48   | 194  | 137   | 0         | 151  | 897  | 136   | 0          | 323  | 1,027 | 40    | 0          | 84   | 900  | 47    | 3,984 |



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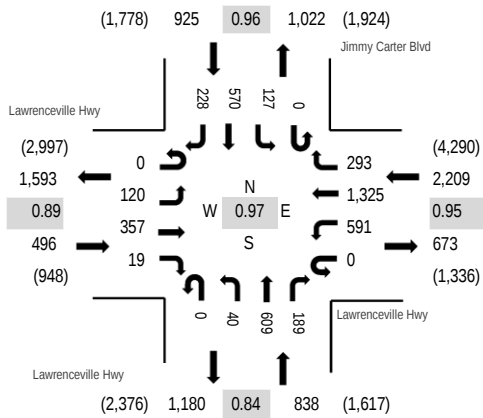
**Location:** 4 Mt Industria Blvd & Lawrenceville Hwy AM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 07:00 AM - 08:00 AM

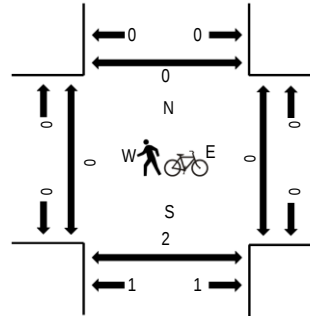
**Peak 15-Minutes:** 07:15 AM - 07:30 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Lawrenceville Hwy Eastbound |      |      |       | Lawrenceville Hwy Westbound |      |      |       | Mt Industria Blvd Northbound |      |      |       | Jimmy Carter Blvd Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------------------------|------|------|-------|------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                       | Left | Thru | Right | U-Turn                       | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                           | 21   | 70   | 12    | 0                           | 151  | 331  | 74    | 0                            | 11   | 172  | 37    | 0                            | 29   | 124  | 45    | 1,077 | 4,468           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                           | 38   | 78   | 2     | 0                           | 145  | 323  | 75    | 0                            | 10   | 177  | 62    | 0                            | 27   | 157  | 57    | 1,151 | 4,464           | 0                    | 0    | 0     | 0     |
| 7:30 AM                | 0                           | 28   | 106  | 1     | 0                           | 127  | 324  | 69    | 0                            | 7    | 149  | 40    | 0                            | 28   | 162  | 62    | 1,103 | 4,417           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                           | 33   | 103  | 4     | 0                           | 168  | 347  | 75    | 0                            | 12   | 111  | 50    | 0                            | 43   | 127  | 64    | 1,137 | 4,344           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                           | 31   | 60   | 6     | 0                           | 179  | 287  | 68    | 0                            | 6    | 150  | 42    | 0                            | 33   | 163  | 48    | 1,073 | 4,165           | 1                    | 0    | 0     | 0     |
| 8:15 AM                | 0                           | 36   | 86   | 7     | 0                           | 177  | 332  | 63    | 0                            | 7    | 124  | 49    | 0                            | 38   | 138  | 47    | 1,104 |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                           | 31   | 68   | 3     | 0                           | 151  | 332  | 65    | 0                            | 10   | 126  | 61    | 0                            | 35   | 111  | 37    | 1,030 |                 | 0                    | 0    | 0     | 0     |
| 8:45 AM                | 0                           | 32   | 88   | 4     | 0                           | 131  | 245  | 51    | 0                            | 10   | 125  | 69    | 0                            | 34   | 126  | 43    | 958   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

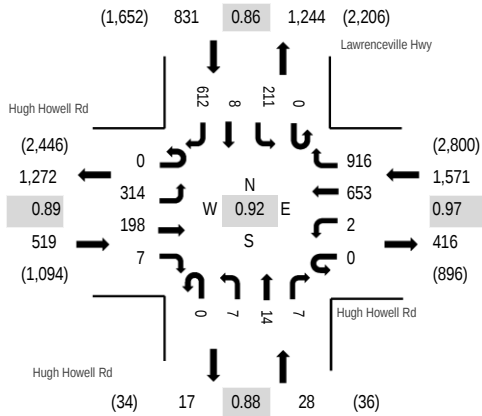
| Vehicle Type       | Eastbound |      |      |       | Westbound |      |       |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|-------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru  | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 1    | 2    | 2     | 0         | 5    | 1     | 1     | 0          | 0    | 10   | 1     | 0          | 1    | 11   | 1     | 36    |
| Lights             | 0         | 112  | 342  | 17    | 0         | 570  | 1,299 | 283   | 0          | 36   | 576  | 178   | 0          | 119  | 543  | 217   | 4,292 |
| Mediums            | 0         | 7    | 13   | 0     | 0         | 16   | 25    | 9     | 0          | 4    | 23   | 10    | 0          | 7    | 16   | 10    | 140   |
| Total              | 0         | 120  | 357  | 19    | 0         | 591  | 1,325 | 293   | 0          | 40   | 609  | 189   | 0          | 127  | 570  | 228   | 4,468 |



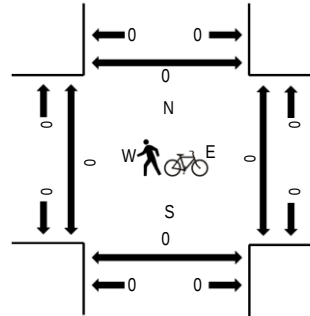
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**Location:** 5 Drwy & Hugh Howell Rd AM  
**Date and Start Time:** Wednesday, May 11, 2016  
**Peak Hour:** 07:00 AM - 08:00 AM  
**Peak 15-Minutes:** 07:45 AM - 08:00 AM

### Peak Hour - All Vehicles



### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Drwy<br>Northbound |      |      |       | Lawrenceville Hwy<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|--------------------|------|------|-------|---------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn             | Left | Thru | Right | U-Turn                          | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                           | 72   | 44   | 1     | 0                           | 1    | 153  | 240   | 0                  | 3    | 1    | 1     | 0                               | 28   | 1    | 132   | 677   | 2,949           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                           | 68   | 37   | 2     | 0                           | 0    | 167  | 237   | 0                  | 1    | 4    | 2     | 0                               | 53   | 1    | 148   | 720   | 2,940           | 0                    | 0    | 0     | 0     |
| 7:30 AM                | 0                           | 78   | 52   | 0     | 0                           | 0    | 177  | 227   | 0                  | 2    | 4    | 2     | 0                               | 52   | 4    | 156   | 754   | 2,884           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                           | 96   | 65   | 4     | 0                           | 1    | 156  | 212   | 0                  | 1    | 5    | 2     | 0                               | 78   | 2    | 176   | 798   | 2,811           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                           | 67   | 57   | 1     | 0                           | 0    | 163  | 164   | 0                  | 3    | 0    | 0     | 0                               | 62   | 5    | 146   | 668   | 2,633           | 0                    | 0    | 0     | 1     |
| 8:15 AM                | 0                           | 85   | 58   | 0     | 0                           | 0    | 150  | 184   | 0                  | 0    | 2    | 0     | 0                               | 45   | 4    | 136   | 664   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                           | 84   | 70   | 2     | 0                           | 1    | 135  | 158   | 0                  | 2    | 0    | 0     | 0                               | 67   | 2    | 160   | 681   |                 | 0                    | 1    | 1     | 0     |
| 8:45 AM                | 0                           | 84   | 66   | 1     | 0                           | 0    | 141  | 133   | 0                  | 0    | 1    | 0     | 0                               | 55   | 1    | 138   | 620   |                 | 0                    | 2    | 2     | 1     |

### Peak Rolling Hour Flow Rates

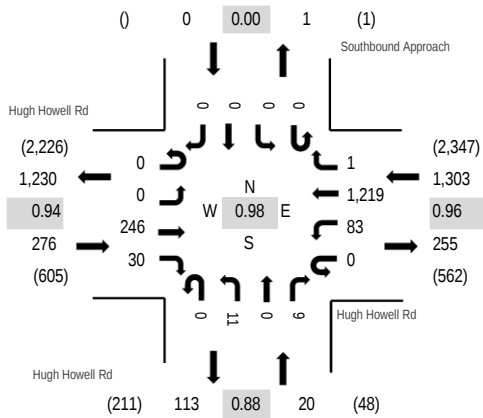
| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 3    | 4    | 0     | 0         | 0    | 6    | 1     | 0          | 0    | 0    | 0     | 0          | 1    | 0    | 3     | 18    |
| Lights             | 0         | 298  | 181  | 7     | 0         | 2    | 617  | 907   | 0          | 7    | 14   | 7     | 0          | 201  | 8    | 595   | 2,844 |
| Mediums            | 0         | 13   | 13   | 0     | 0         | 0    | 30   | 8     | 0          | 0    | 0    | 0     | 0          | 9    | 0    | 14    | 87    |
| Total              | 0         | 314  | 198  | 7     | 0         | 2    | 653  | 916   | 0          | 7    | 14   | 7     | 0          | 211  | 8    | 612   | 2,949 |



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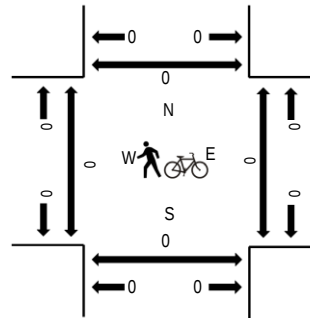
**Location:** 6 Flintstone Dr & Hugh Howell Rd AM  
**Date and Start Time:** Wednesday, May 11, 2016  
**Peak Hour:** 07:00 AM - 08:00 AM  
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Flintstone Dr<br>Northbound |      |      |       | Southbound Approach<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|-----------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                            | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                           | 0    | 47   | 3     | 0                           | 15   | 323  | 0     | 0                           | 4    | 0    | 3     | 0                                 | 0    | 0    | 0     | 395   | 1,599           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                           | 0    | 46   | 9     | 0                           | 18   | 322  | 0     | 0                           | 4    | 0    | 2     | 0                                 | 0    | 0    | 0     | 401   | 1,586           | 0                    | 0    | 0     | 0     |
| 7:30 AM                | 0                           | 0    | 77   | 6     | 0                           | 19   | 303  | 1     | 0                           | 0    | 0    | 4     | 0                                 | 0    | 0    | 0     | 410   | 1,559           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                           | 0    | 76   | 12    | 0                           | 31   | 271  | 0     | 0                           | 3    | 0    | 0     | 0                                 | 0    | 0    | 0     | 393   | 1,492           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                           | 0    | 74   | 7     | 0                           | 23   | 271  | 0     | 0                           | 2    | 0    | 5     | 0                                 | 0    | 0    | 0     | 382   | 1,401           | 0                    | 0    | 0     | 1     |
| 8:15 AM                | 0                           | 0    | 79   | 12    | 0                           | 11   | 264  | 0     | 0                           | 4    | 0    | 4     | 0                                 | 0    | 0    | 0     | 374   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 1                           | 0    | 72   | 8     | 0                           | 11   | 245  | 0     | 0                           | 3    | 0    | 3     | 0                                 | 0    | 0    | 0     | 343   |                 | 0                    | 0    | 0     | 0     |
| 8:45 AM                | 0                           | 0    | 67   | 9     | 0                           | 17   | 202  | 0     | 0                           | 4    | 0    | 3     | 0                                 | 0    | 0    | 0     | 302   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |       |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|-------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru  | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 0     | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 0     |
| Lights             | 0         | 0    | 231  | 30    | 0         | 82   | 1,202 | 1     | 0          | 10   | 0    | 9     | 0          | 0    | 0    | 0     | 1,565 |
| Mediums            | 0         | 0    | 15   | 0     | 0         | 1    | 17    | 0     | 0          | 1    | 0    | 0     | 0          | 0    | 0    | 0     | 34    |
| Total              | 0         | 0    | 246  | 30    | 0         | 83   | 1,219 | 1     | 0          | 11   | 0    | 9     | 0          | 0    | 0    | 0     | 1,599 |



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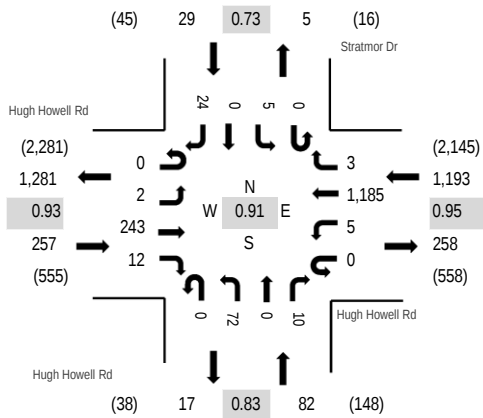
Location: 7 McCurdy Rd & Hugh Howell Rd AM

Date and Start Time: Wednesday, May 11, 2016

Peak Hour: 07:00 AM - 08:00 AM

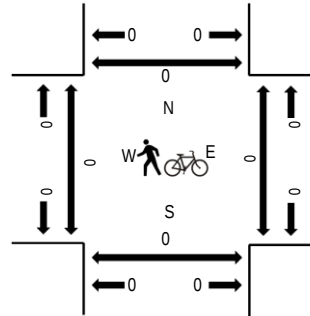
Peak 15-Minutes: 07:30 AM - 07:45 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | McCurdy Rd<br>Northbound |      |      |       | Stratmor Dr<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|--------------------------|------|------|-------|---------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                   | Left | Thru | Right | U-Turn                    | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                           | 0    | 48   | 3     | 0                           | 0    | 311  | 0     | 0                        | 13   | 0    | 3     | 0                         | 1    | 0    | 7     | 386   | 1,561           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                           | 0    | 47   | 3     | 0                           | 2    | 284  | 0     | 0                        | 25   | 0    | 1     | 0                         | 2    | 0    | 8     | 372   | 1,548           | 0                    | 0    | 0     | 0     |
| 7:30 AM                | 0                           | 2    | 80   | 2     | 0                           | 1    | 312  | 2     | 0                        | 18   | 0    | 3     | 0                         | 2    | 0    | 6     | 428   | 1,516           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                           | 0    | 68   | 4     | 0                           | 2    | 278  | 1     | 0                        | 16   | 0    | 3     | 0                         | 0    | 0    | 3     | 375   | 1,436           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                           | 2    | 70   | 3     | 0                           | 2    | 272  | 0     | 0                        | 13   | 0    | 7     | 0                         | 0    | 0    | 4     | 373   | 1,332           | 0                    | 0    | 0     | 0     |
| 8:15 AM                | 0                           | 2    | 75   | 4     | 0                           | 1    | 235  | 1     | 0                        | 15   | 0    | 3     | 0                         | 1    | 0    | 3     | 340   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                           | 1    | 74   | 2     | 0                           | 3    | 247  | 0     | 0                        | 14   | 0    | 4     | 0                         | 2    | 0    | 1     | 348   |                 | 0                    | 0    | 0     | 0     |
| 8:45 AM                | 0                           | 3    | 57   | 5     | 0                           | 1    | 188  | 2     | 0                        | 7    | 0    | 3     | 0                         | 4    | 0    | 1     | 271   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |       |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|-------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru  | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 1     | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 1     |
| Lights             | 0         | 1    | 232  | 9     | 0         | 4    | 1,169 | 3     | 0          | 71   | 0    | 10    | 0          | 5    | 0    | 23    | 1,527 |
| Mediums            | 0         | 1    | 11   | 3     | 0         | 1    | 15    | 0     | 0          | 1    | 0    | 0     | 0          | 0    | 0    | 1     | 33    |
| Total              | 0         | 2    | 243  | 12    | 0         | 5    | 1,185 | 3     | 0          | 72   | 0    | 10    | 0          | 5    | 0    | 24    | 1,561 |



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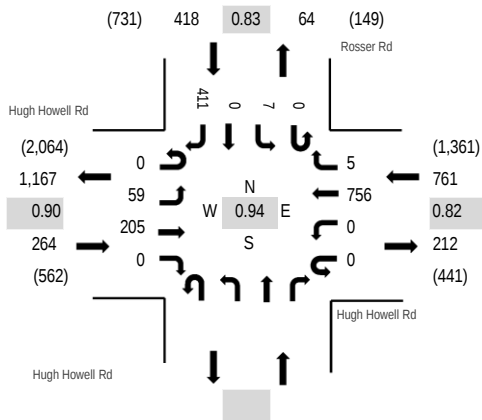
Location: 8 Rosser Rd & Hugh Howell Rd AM

Date and Start Time: Wednesday, May 11, 2016

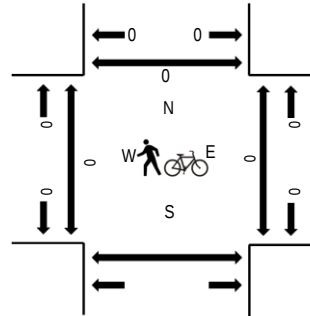
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

### Peak Hour - All Vehicles



### Peak Hour - Pedestrians/Bicycles in Crosswalk



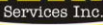
Note: Total study counts contained in parentheses.

### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Northbound |      |      |       | Rosser Rd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------|------|------|-------|-------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn                  | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                           | 11   | 41   | 0     | 0                           | 0    | 228  | 4     |            |      |      |       | 0                       | 1    | 0    | 86    | 371   | 1,443           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                           | 11   | 49   | 0     | 0                           | 0    | 187  | 1     |            |      |      |       | 0                       | 3    | 0    | 89    | 340   | 1,408           | 0                    | 0    | 0     | 0     |
| 7:30 AM                | 0                           | 24   | 57   | 0     | 0                           | 0    | 177  | 0     |            |      |      |       | 0                       | 2    | 0    | 125   | 385   | 1,403           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                           | 13   | 58   | 0     | 0                           | 0    | 164  | 0     |            |      |      |       | 0                       | 1    | 0    | 111   | 347   | 1,301           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                           | 23   | 52   | 0     | 0                           | 0    | 168  | 2     |            |      |      |       | 0                       | 1    | 0    | 90    | 336   | 1,211           | 0                    | 0    | 0     | 0     |
| 8:15 AM                | 0                           | 14   | 73   | 0     | 0                           | 0    | 164  | 4     |            |      |      |       | 0                       | 1    | 0    | 79    | 335   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                           | 14   | 56   | 0     | 0                           | 0    | 137  | 3     |            |      |      |       | 0                       | 1    | 0    | 72    | 283   |                 | 0                    | 0    | 0     | 0     |
| 8:45 AM                | 0                           | 23   | 43   | 0     | 0                           | 0    | 120  | 2     |            |      |      |       | 0                       | 2    | 0    | 67    | 257   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 1    | 0     |            |      |      |       | 0          | 0    | 0    | 0     | 1     |
| Lights             | 0         | 57   | 198  | 0     | 0         | 0    | 743  | 5     |            |      |      |       | 0          | 7    | 0    | 406   | 1,416 |
| Mediums            | 0         | 2    | 7    | 0     | 0         | 0    | 12   | 0     |            |      |      |       | 0          | 0    | 0    | 5     | 26    |
| Total              | 0         | 59   | 205  | 0     | 0         | 0    | 756  | 5     |            |      |      |       | 0          | 7    | 0    | 411   | 1,443 |



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**Peak 15-Minutes:** 07:30 AM - 07:45 AM

Note: Total study counts contained in parentheses.



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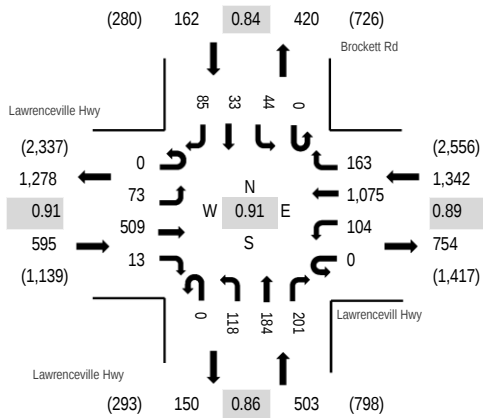
Location: 10 Brockett Rd & Lawrencevill Hwy AM

Date and Start Time: Wednesday, May 11, 2016

Peak Hour: 07:15 AM - 08:15 AM

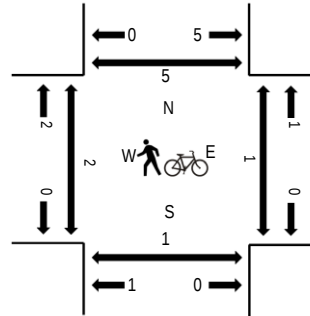
Peak 15-Minutes: 07:45 AM - 08:00 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Lawrenceville Hwy<br>Eastbound |      |      |       | Lawrencevill Hwy<br>Westbound |      |      |       | Brockett Rd<br>Northbound |      |      |       | Brockett Rd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|--------------------------------|------|------|-------|-------------------------------|------|------|-------|---------------------------|------|------|-------|---------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                         | Left | Thru | Right | U-Turn                        | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                    | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                              | 18   | 108  | 6     | 0                             | 24   | 226  | 45    | 0                         | 16   | 34   | 40    | 0                         | 7    | 6    | 10    | 540   | 2,507           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                              | 21   | 97   | 3     | 0                             | 15   | 250  | 49    | 0                         | 30   | 46   | 59    | 0                         | 7    | 6    | 20    | 603   | 2,602           | 0                    | 0    | 0     | 1     |
| 7:30 AM                | 0                              | 15   | 116  | 0     | 0                             | 33   | 266  | 24    | 0                         | 35   | 53   | 59    | 0                         | 15   | 10   | 23    | 649   | 2,593           | 2                    | 0    | 0     | 3     |
| 7:45 AM                | 0                              | 19   | 146  | 4     | 0                             | 24   | 312  | 54    | 0                         | 23   | 45   | 41    | 0                         | 10   | 12   | 25    | 715   | 2,503           | 0                    | 1    | 0     | 1     |
| 8:00 AM                | 0                              | 18   | 150  | 6     | 0                             | 32   | 247  | 36    | 0                         | 30   | 40   | 42    | 0                         | 12   | 5    | 17    | 635   | 2,266           | 0                    | 0    | 1     | 0     |
| 8:15 AM                | 0                              | 15   | 126  | 3     | 0                             | 22   | 288  | 44    | 0                         | 11   | 21   | 34    | 0                         | 10   | 7    | 13    | 594   |                 | 0                    | 1    | 0     | 0     |
| 8:30 AM                | 0                              | 11   | 135  | 3     | 0                             | 28   | 256  | 18    | 0                         | 10   | 28   | 38    | 0                         | 15   | 8    | 9     | 559   |                 | 0                    | 0    | 1     | 0     |
| 8:45 AM                | 0                              | 11   | 105  | 3     | 0                             | 24   | 202  | 37    | 0                         | 3    | 24   | 36    | 0                         | 9    | 9    | 15    | 478   |                 | 0                    | 1    | 2     | 1     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |       |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|-------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru  | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 1    | 6    | 0     | 0         | 0    | 7     | 2     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 3     | 19    |
| Lights             | 0         | 70   | 477  | 12    | 0         | 97   | 1,033 | 156   | 0          | 115  | 184  | 192   | 0          | 41   | 33   | 78    | 2,488 |
| Mediums            | 0         | 2    | 26   | 1     | 0         | 7    | 35    | 5     | 0          | 3    | 0    | 9     | 0          | 3    | 0    | 4     | 95    |
| Total              | 0         | 73   | 509  | 13    | 0         | 104  | 1,075 | 163   | 0          | 118  | 184  | 201   | 0          | 44   | 33   | 85    | 2,602 |



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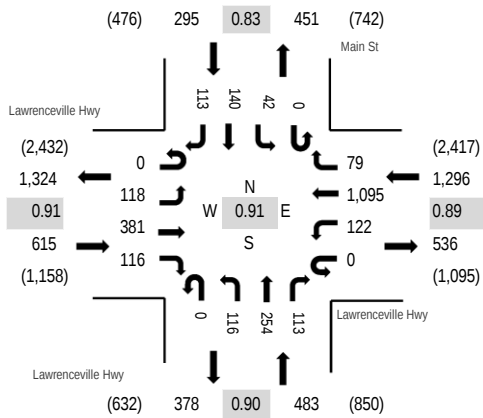
**Location:** 11 Idlewood Rd & Lawrenceville Hwy AM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 07:15 AM - 08:15 AM

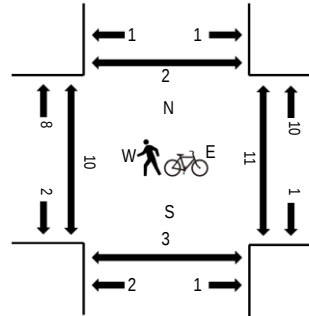
**Peak 15-Minutes:** 07:45 AM - 08:00 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Lawrenceville Hwy<br>Eastbound |      |      |       | Lawrenceville Hwy<br>Westbound |      |      |       | Idlewood Rd<br>Northbound |      |      |       | Main St<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|--------------------------------|------|------|-------|--------------------------------|------|------|-------|---------------------------|------|------|-------|-----------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                         | Left | Thru | Right | U-Turn                         | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                              | 16   | 67   | 4     | 0                              | 24   | 212  | 15    | 0                         | 15   | 36   | 25    | 0                     | 9    | 8    | 15    | 446   | 2,443           | 3                    | 2    | 0     | 1     |
| 7:15 AM                | 0                              | 22   | 78   | 19    | 0                              | 24   | 282  | 21    | 0                         | 37   | 55   | 29    | 0                     | 7    | 28   | 19    | 621   | 2,689           | 5                    | 3    | 3     | 0     |
| 7:30 AM                | 0                              | 44   | 91   | 13    | 0                              | 28   | 244  | 22    | 0                         | 29   | 81   | 24    | 0                     | 9    | 30   | 23    | 638   | 2,656           | 1                    | 5    | 0     | 1     |
| 7:45 AM                | 0                              | 29   | 109  | 29    | 0                              | 34   | 317  | 15    | 0                         | 22   | 62   | 30    | 0                     | 13   | 43   | 35    | 738   | 2,626           | 3                    | 1    | 0     | 0     |
| 8:00 AM                | 0                              | 23   | 103  | 55    | 0                              | 36   | 252  | 21    | 0                         | 28   | 56   | 30    | 0                     | 13   | 39   | 36    | 692   | 2,458           | 1                    | 2    | 0     | 1     |
| 8:15 AM                | 0                              | 19   | 95   | 36    | 0                              | 22   | 231  | 17    | 0                         | 37   | 39   | 31    | 0                     | 11   | 26   | 24    | 588   |                 | 4                    | 0    | 1     | 0     |
| 8:30 AM                | 0                              | 20   | 115  | 27    | 0                              | 25   | 263  | 22    | 0                         | 33   | 21   | 39    | 0                     | 8    | 14   | 21    | 608   |                 | 3                    | 1    | 0     | 1     |
| 8:45 AM                | 0                              | 22   | 111  | 11    | 0                              | 40   | 230  | 20    | 0                         | 15   | 44   | 32    | 0                     | 16   | 17   | 12    | 570   |                 | 3                    | 0    | 0     | 1     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |       |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|-------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru  | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 6    | 0     | 0         | 1    | 8     | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 15    |
| Lights             | 0         | 113  | 355  | 112   | 0         | 113  | 1,061 | 78    | 0          | 110  | 252  | 112   | 0          | 37   | 135  | 107   | 2,585 |
| Mediums            | 0         | 5    | 20   | 4     | 0         | 8    | 26    | 1     | 0          | 6    | 2    | 1     | 0          | 5    | 5    | 6     | 89    |
| Total              | 0         | 118  | 381  | 116   | 0         | 122  | 1,095 | 79    | 0          | 116  | 254  | 113   | 0          | 42   | 140  | 113   | 2,689 |



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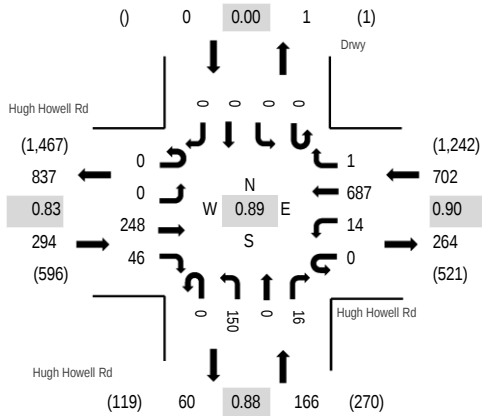
**Location:** 12 Silver Hill Rd & Hugh Howell Rd AM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 07:00 AM - 08:00 AM

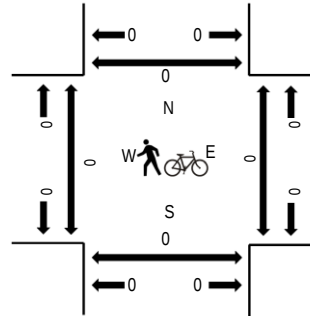
**Peak 15-Minutes:** 07:30 AM - 07:45 AM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Silver Hill Rd<br>Northbound |      |      |       | Drwy<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------------------------|------|------|-------|--------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                       | Left | Thru | Right | U-Turn             | Left | Thru | Right |       |                 | West                 | East | South | North |
| 7:00 AM                | 0                           | 0    | 47   | 11    | 0                           | 3    | 191  | 0     | 0                            | 42   | 0    | 3     | 0                  | 0    | 0    | 0     | 297   | 1,162           | 0                    | 0    | 0     | 0     |
| 7:15 AM                | 0                           | 0    | 49   | 11    | 0                           | 3    | 172  | 0     | 0                            | 35   | 0    | 5     | 0                  | 0    | 0    | 0     | 275   | 1,098           | 0                    | 0    | 0     | 0     |
| 7:30 AM                | 0                           | 0    | 84   | 14    | 0                           | 6    | 174  | 1     | 0                            | 43   | 0    | 4     | 0                  | 0    | 0    | 0     | 326   | 1,094           | 0                    | 0    | 0     | 0     |
| 7:45 AM                | 0                           | 0    | 68   | 10    | 0                           | 2    | 150  | 0     | 0                            | 30   | 0    | 4     | 0                  | 0    | 0    | 0     | 264   | 1,029           | 0                    | 0    | 0     | 0     |
| 8:00 AM                | 0                           | 0    | 50   | 11    | 0                           | 6    | 137  | 0     | 0                            | 26   | 0    | 3     | 0                  | 0    | 0    | 0     | 233   | 946             | 0                    | 0    | 0     | 0     |
| 8:15 AM                | 0                           | 0    | 73   | 16    | 0                           | 0    | 154  | 0     | 0                            | 28   | 0    | 0     | 0                  | 0    | 0    | 0     | 271   |                 | 0                    | 0    | 0     | 0     |
| 8:30 AM                | 0                           | 0    | 79   | 15    | 0                           | 2    | 135  | 0     | 0                            | 28   | 0    | 2     | 0                  | 0    | 0    | 0     | 261   |                 | 0                    | 0    | 0     | 0     |
| 8:45 AM                | 0                           | 0    | 49   | 9     | 0                           | 0    | 106  | 0     | 0                            | 16   | 0    | 1     | 0                  | 0    | 0    | 0     | 181   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 0     |
| Lights             | 0         | 0    | 241  | 43    | 0         | 12   | 672  | 1     | 0          | 147  | 0    | 16    | 0          | 0    | 0    | 0     | 1,132 |
| Mediums            | 0         | 0    | 7    | 3     | 0         | 2    | 15   | 0     | 0          | 3    | 0    | 0     | 0          | 0    | 0    | 0     | 30    |
| Total              | 0         | 0    | 248  | 46    | 0         | 14   | 687  | 1     | 0          | 150  | 0    | 16    | 0          | 0    | 0    | 0     | 1,162 |

# All Traffic Data Service, Inc

1336 Farmer Road

Conyers, Ga 30012

404-374-1283

File Name : #12 SilverHillRd@HughHowellRdAM

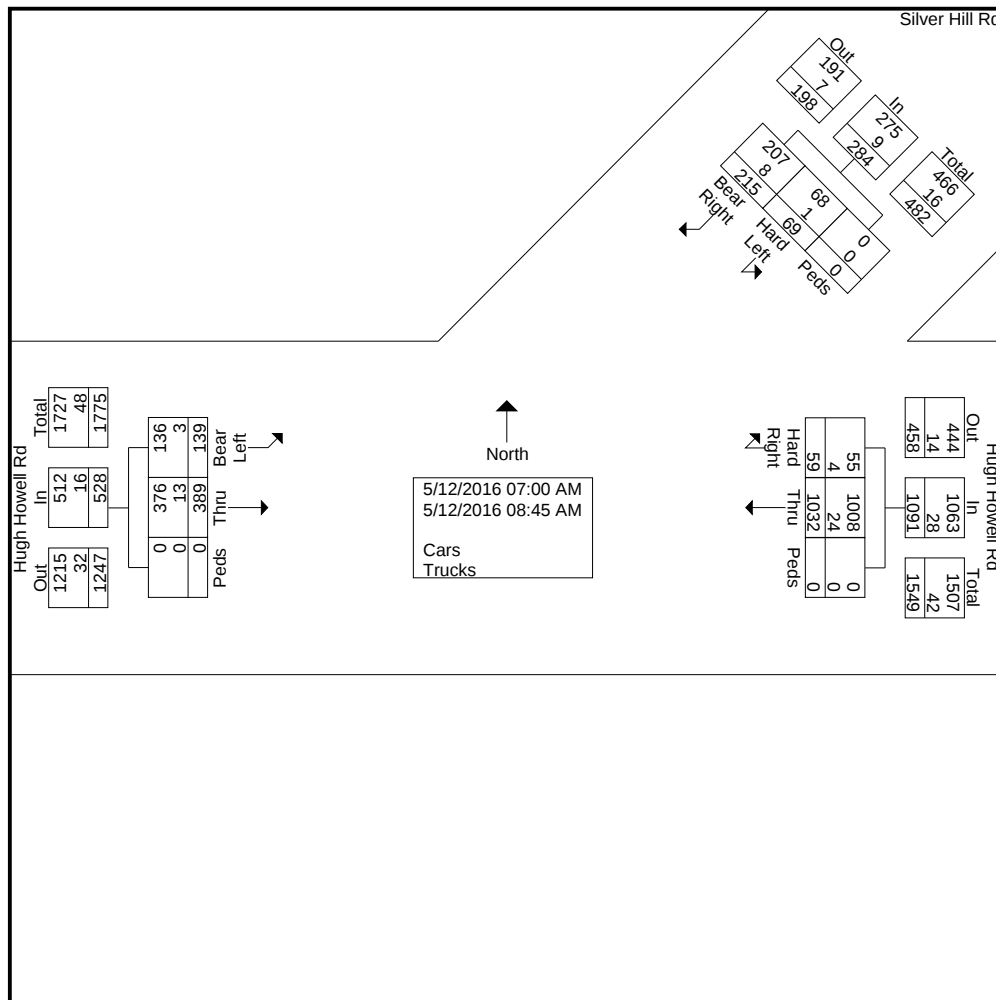
Site Code : 9

Start Date : 5/12/2016

Page No : 1

Groups Printed- Cars - Trucks

|             | Silver Hill Rd<br>Southwestbound |           |      |            | Hugh Howell Rd<br>Westbound |      |      |            | Hugh Howell Rd<br>Eastbound |           |      |            |            |
|-------------|----------------------------------|-----------|------|------------|-----------------------------|------|------|------------|-----------------------------|-----------|------|------------|------------|
| Start Time  | Bear Right                       | Hard Left | Peds | App. Total | Hard Right                  | Thru | Peds | App. Total | Thru                        | Bear Left | Peds | App. Total | Int. Total |
| 07:00 AM    | 47                               | 11        | 0    | 58         | 11                          | 159  | 0    | 170        | 33                          | 20        | 0    | 53         | 281        |
| 07:15 AM    | 41                               | 17        | 0    | 58         | 10                          | 132  | 0    | 142        | 24                          | 32        | 0    | 56         | 256        |
| 07:30 AM    | 44                               | 16        | 0    | 60         | 14                          | 128  | 0    | 142        | 39                          | 45        | 0    | 84         | 286        |
| 07:45 AM    | 25                               | 5         | 0    | 30         | 5                           | 123  | 0    | 128        | 56                          | 13        | 0    | 69         | 227        |
| Total       | 157                              | 49        | 0    | 206        | 40                          | 542  | 0    | 582        | 152                         | 110       | 0    | 262        | 1050       |
| 08:00 AM    | 15                               | 2         | 0    | 17         | 6                           | 141  | 0    | 147        | 54                          | 10        | 0    | 64         | 228        |
| 08:15 AM    | 17                               | 5         | 0    | 22         | 4                           | 136  | 0    | 140        | 65                          | 7         | 0    | 72         | 234        |
| 08:30 AM    | 15                               | 6         | 0    | 21         | 4                           | 117  | 0    | 121        | 73                          | 6         | 0    | 79         | 221        |
| 08:45 AM    | 11                               | 7         | 0    | 18         | 5                           | 96   | 0    | 101        | 45                          | 6         | 0    | 51         | 170        |
| Total       | 58                               | 20        | 0    | 78         | 19                          | 490  | 0    | 509        | 237                         | 29        | 0    | 266        | 853        |
| Grand Total | 215                              | 69        | 0    | 284        | 59                          | 1032 | 0    | 1091       | 389                         | 139       | 0    | 528        | 1903       |
| Apprch %    | 75.7                             | 24.3      | 0    |            | 5.4                         | 94.6 | 0    |            | 73.7                        | 26.3      | 0    |            |            |
| Total %     | 11.3                             | 3.6       | 0    | 14.9       | 3.1                         | 54.2 | 0    | 57.3       | 20.4                        | 7.3       | 0    | 27.7       |            |
| Cars        | 207                              | 68        | 0    | 275        | 55                          | 1008 | 0    | 1063       | 376                         | 136       | 0    | 512        | 1850       |
| % Cars      | 96.3                             | 98.6      | 0    | 96.8       | 93.2                        | 97.7 | 0    | 97.4       | 96.7                        | 97.8      | 0    | 97         | 97.2       |
| Trucks      | 8                                | 1         | 0    | 9          | 4                           | 24   | 0    | 28         | 13                          | 3         | 0    | 16         | 53         |
| % Trucks    | 3.7                              | 1.4       | 0    | 3.2        | 6.8                         | 2.3  | 0    | 2.6        | 3.3                         | 2.2       | 0    | 3          | 2.8        |



# All Traffic Data Service, Inc

1336 Farmer Road

Conyers, Ga 30012

404-374-1283

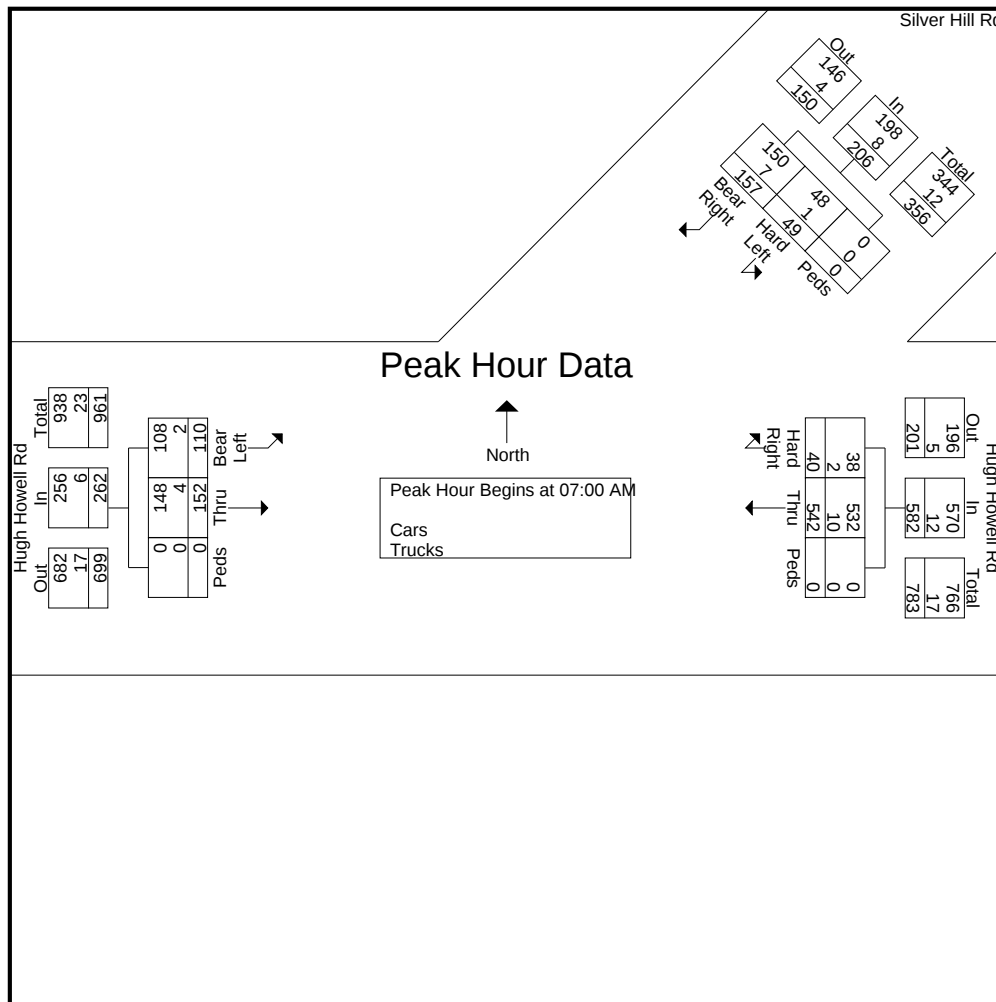
File Name : #12 SilverHillRd@HughHowellRdAM

Site Code : 9

Start Date : 5/12/2016

Page No : 2

|                                                            | Silver Hill Rd<br>Southwestbound |           |      |            | Hugh Howell Rd<br>Westbound |      |      |            | Hugh Howell Rd<br>Eastbound |           |      |            |            |
|------------------------------------------------------------|----------------------------------|-----------|------|------------|-----------------------------|------|------|------------|-----------------------------|-----------|------|------------|------------|
| Start Time                                                 | Bear Right                       | Hard Left | Peds | App. Total | Hard Right                  | Thru | Peds | App. Total | Thru                        | Bear Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                  |           |      |            |                             |      |      |            |                             |           |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                                  |           |      |            |                             |      |      |            |                             |           |      |            |            |
| 07:00 AM                                                   | 47                               | 11        | 0    | 58         | 11                          | 159  | 0    | 170        | 33                          | 20        | 0    | 53         | 281        |
| 07:15 AM                                                   | 41                               | 17        | 0    | 58         | 10                          | 132  | 0    | 142        | 24                          | 32        | 0    | 56         | 256        |
| 07:30 AM                                                   | 44                               | 16        | 0    | 60         | 14                          | 128  | 0    | 142        | 39                          | 45        | 0    | 84         | 286        |
| 07:45 AM                                                   | 25                               | 5         | 0    | 30         | 5                           | 123  | 0    | 128        | 56                          | 13        | 0    | 69         | 227        |
| Total Volume                                               | 157                              | 49        | 0    | 206        | 40                          | 542  | 0    | 582        | 152                         | 110       | 0    | 262        | 1050       |
| % App. Total                                               | 76.2                             | 23.8      | 0    |            | 6.9                         | 93.1 | 0    |            | 58                          | 42        | 0    |            |            |
| PHF                                                        | .835                             | .721      | .000 | .858       | .714                        | .852 | .000 | .856       | .679                        | .611      | .000 | .780       | .918       |
| Cars                                                       | 150                              | 48        | 0    | 198        | 38                          | 532  | 0    | 570        | 148                         | 108       | 0    | 256        | 1024       |
| % Cars                                                     | 95.5                             | 98.0      | 0    | 96.1       | 95.0                        | 98.2 | 0    | 97.9       | 97.4                        | 98.2      | 0    | 97.7       | 97.5       |
| Trucks                                                     | 7                                | 1         | 0    | 8          | 2                           | 10   | 0    | 12         | 4                           | 2         | 0    | 6          | 26         |
| % Trucks                                                   | 4.5                              | 2.0       | 0    | 3.9        | 5.0                         | 1.8  | 0    | 2.1        | 2.6                         | 1.8       | 0    | 2.3        | 2.5        |





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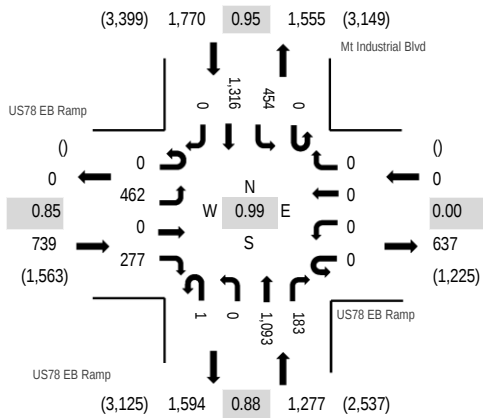
**Location:** 1 Mt Industrial Blvd & US78 EB Ramp PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 04:45 PM - 05:45 PM

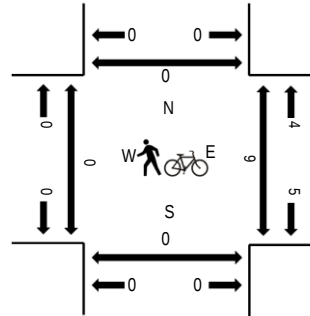
**Peak 15-Minutes:** 05:15 PM - 05:30 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | US78 EB Ramp<br>Eastbound |      |      |       | US78 EB Ramp<br>Westbound |      |      |       | Mt Industrial Blvd<br>Northbound |      |      |       | Mt Industrial Blvd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|---------------------------|------|------|-------|---------------------------|------|------|-------|----------------------------------|------|------|-------|----------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                    | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                           | Left | Thru | Right | U-Turn                           | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                         | 141  | 0    | 92    | 0                         | 0    | 0    | 0     | 0                                | 0    | 307  | 54    | 0                                | 92   | 250  | 0     | 936   | 3,716           | 1                    | 0    | 0     | 0     |
| 4:15 PM                | 0                         | 125  | 0    | 78    | 0                         | 0    | 0    | 0     | 0                                | 0    | 291  | 39    | 0                                | 96   | 301  | 0     | 930   | 3,732           | 0                    | 1    | 0     | 0     |
| 4:30 PM                | 0                         | 102  | 0    | 72    | 0                         | 0    | 0    | 0     | 0                                | 0    | 246  | 59    | 0                                | 117  | 326  | 0     | 922   | 3,762           | 0                    | 6    | 0     | 0     |
| 4:45 PM                | 0                         | 112  | 0    | 74    | 0                         | 0    | 0    | 0     | 0                                | 0    | 252  | 43    | 0                                | 128  | 319  | 0     | 928   | 3,786           | 0                    | 2    | 0     | 0     |
| 5:00 PM                | 0                         | 104  | 0    | 66    | 0                         | 0    | 0    | 0     | 1                                | 0    | 300  | 69    | 0                                | 101  | 311  | 0     | 952   | 3,783           | 0                    | 4    | 0     | 0     |
| 5:15 PM                | 0                         | 125  | 0    | 70    | 0                         | 0    | 0    | 0     | 0                                | 0    | 257  | 43    | 0                                | 124  | 341  | 0     | 960   |                 | 0                    | 0    | 0     | 0     |
| 5:30 PM                | 0                         | 121  | 0    | 67    | 0                         | 0    | 0    | 0     | 0                                | 0    | 284  | 28    | 0                                | 101  | 345  | 0     | 946   |                 | 0                    | 3    | 0     | 0     |
| 5:45 PM                | 0                         | 150  | 0    | 64    | 0                         | 0    | 0    | 0     | 0                                | 0    | 232  | 32    | 0                                | 99   | 348  | 0     | 925   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |       |       | Southbound |      |       |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|-------|-------|------------|------|-------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru  | Right | U-Turn     | Left | Thru  | Right |       |
| Articulated Trucks | 0         | 17   | 0    | 18    | 0         | 0    | 0    | 0     | 0          | 0    | 29    | 0     | 0          | 0    | 9     | 0     | 73    |
| Lights             | 0         | 426  | 0    | 218   | 0         | 0    | 0    | 0     | 0          | 0    | 1,032 | 183   | 0          | 447  | 1,268 | 0     | 3,574 |
| Mediums            | 0         | 19   | 0    | 41    | 0         | 0    | 0    | 0     | 1          | 0    | 32    | 0     | 0          | 7    | 39    | 0     | 139   |
| Total              | 0         | 462  | 0    | 277   | 0         | 0    | 0    | 0     | 1          | 0    | 1,093 | 183   | 0          | 454  | 1,316 | 0     | 3,786 |



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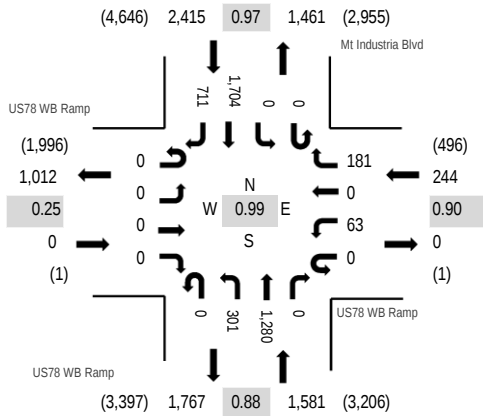
**Location:** 1 Mt Industrial Blvd & US78 WB Ramp PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 04:45 PM - 05:45 PM

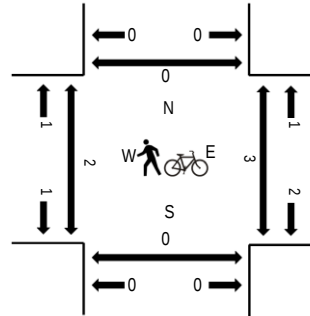
**Peak 15-Minutes:** 05:15 PM - 05:30 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | US78 WB Ramp<br>Eastbound |      |      |       | US78 WB Ramp<br>Westbound |      |      |       | Mt Industrial Blvd<br>Northbound |      |      |       | Mt Industrial Blvd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|---------------------------|------|------|-------|---------------------------|------|------|-------|----------------------------------|------|------|-------|----------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                    | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                           | Left | Thru | Right | U-Turn                           | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                         | 0    | 1    | 0     | 0                         | 14   | 0    | 50    | 0                                | 79   | 376  | 0     | 0                                | 0    | 329  | 181   | 1,030 | 4,120           | 2                    | 0    | 2     | 0     |
| 4:15 PM                | 0                         | 0    | 0    | 0     | 0                         | 16   | 0    | 42    | 0                                | 84   | 344  | 0     | 0                                | 0    | 370  | 179   | 1,035 | 4,161           | 0                    | 2    | 1     | 0     |
| 4:30 PM                | 0                         | 0    | 0    | 0     | 0                         | 19   | 0    | 34    | 0                                | 77   | 274  | 0     | 0                                | 0    | 423  | 167   | 994   | 4,198           | 1                    | 1    | 0     | 0     |
| 4:45 PM                | 0                         | 0    | 0    | 0     | 0                         | 20   | 0    | 49    | 0                                | 76   | 298  | 0     | 0                                | 0    | 427  | 191   | 1,061 | 4,240           | 1                    | 1    | 0     | 0     |
| 5:00 PM                | 0                         | 0    | 0    | 0     | 0                         | 17   | 0    | 44    | 0                                | 81   | 345  | 0     | 0                                | 0    | 407  | 177   | 1,071 | 4,229           | 1                    | 1    | 0     | 0     |
| 5:15 PM                | 0                         | 0    | 0    | 0     | 0                         | 15   | 0    | 55    | 0                                | 61   | 315  | 0     | 0                                | 0    | 443  | 183   | 1,072 |                 | 0                    | 0    | 0     | 0     |
| 5:30 PM                | 0                         | 0    | 0    | 0     | 0                         | 11   | 0    | 33    | 0                                | 83   | 322  | 0     | 0                                | 0    | 427  | 160   | 1,036 |                 | 0                    | 0    | 0     | 0     |
| 5:45 PM                | 0                         | 0    | 0    | 0     | 0                         | 19   | 0    | 58    | 0                                | 75   | 316  | 0     | 0                                | 0    | 440  | 142   | 1,050 |                 | 0                    | 1    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |       |       | Southbound |      |       |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|-------|-------|------------|------|-------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru  | Right | U-Turn     | Left | Thru  | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 2    | 0    | 1     | 0          | 20   | 25    | 0     | 0          | 0    | 8     | 17    | 73    |
| Lights             | 0         | 0    | 0    | 0     | 0         | 59   | 0    | 177   | 0          | 272  | 1,213 | 0     | 0          | 0    | 1,655 | 683   | 4,059 |
| Mediums            | 0         | 0    | 0    | 0     | 0         | 2    | 0    | 3     | 0          | 9    | 42    | 0     | 0          | 0    | 41    | 11    | 108   |
| Total              | 0         | 0    | 0    | 0     | 0         | 63   | 0    | 181   | 0          | 301  | 1,280 | 0     | 0          | 0    | 1,704 | 711   | 4,240 |



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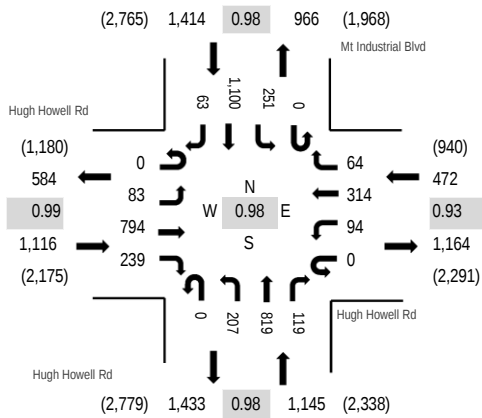
**Location:** 3 Mt Industrial Blvd & Hugh Howell Rd PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 04:30 PM - 05:30 PM

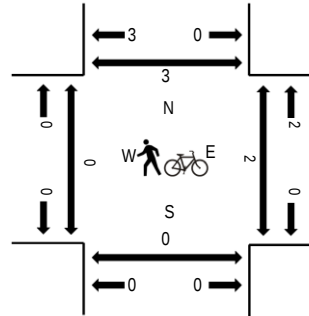
**Peak 15-Minutes:** 05:15 PM - 05:30 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Mt Industrial Blvd<br>Northbound |      |      |       | Mt Industrial Blvd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|----------------------------------|------|------|-------|----------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                           | Left | Thru | Right | U-Turn                           | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                           | 21   | 181  | 52    | 0                           | 24   | 89   | 17    | 0                                | 52   | 216  | 24    | 0                                | 55   | 249  | 29    | 1,009 | 4,091           | 0                    | 0    | 0     | 0     |
| 4:15 PM                | 0                           | 20   | 184  | 58    | 0                           | 18   | 76   | 14    | 0                                | 53   | 247  | 24    | 0                                | 53   | 264  | 19    | 1,030 | 4,117           | 0                    | 0    | 0     | 0     |
| 4:30 PM                | 0                           | 24   | 189  | 64    | 0                           | 19   | 74   | 16    | 0                                | 53   | 190  | 39    | 0                                | 68   | 270  | 12    | 1,018 | 4,147           | 0                    | 0    | 0     | 1     |
| 4:45 PM                | 0                           | 20   | 203  | 59    | 0                           | 26   | 89   | 15    | 0                                | 45   | 198  | 19    | 0                                | 55   | 283  | 22    | 1,034 | 4,143           | 0                    | 0    | 0     | 2     |
| 5:00 PM                | 0                           | 20   | 203  | 54    | 0                           | 23   | 73   | 16    | 0                                | 57   | 212  | 30    | 0                                | 64   | 263  | 20    | 1,035 | 4,127           | 0                    | 2    | 0     | 0     |
| 5:15 PM                | 0                           | 19   | 199  | 62    | 0                           | 26   | 78   | 17    | 0                                | 52   | 219  | 31    | 0                                | 64   | 284  | 9     | 1,060 |                 | 0                    | 0    | 0     | 0     |
| 5:30 PM                | 0                           | 17   | 214  | 38    | 0                           | 26   | 77   | 19    | 0                                | 50   | 195  | 41    | 0                                | 47   | 269  | 21    | 1,014 |                 | 0                    | 0    | 0     | 0     |
| 5:45 PM                | 0                           | 12   | 208  | 54    | 0                           | 21   | 68   | 19    | 0                                | 51   | 205  | 35    | 0                                | 61   | 273  | 11    | 1,018 |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |       |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|-------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru  | Right |       |
| Articulated Trucks | 0         | 1    | 0    | 1     | 0         | 1    | 2    | 1     | 0          | 3    | 24   | 0     | 0          | 3    | 23    | 1     | 60    |
| Lights             | 0         | 78   | 788  | 232   | 0         | 88   | 307  | 62    | 0          | 194  | 765  | 117   | 0          | 245  | 1,047 | 59    | 3,982 |
| Mediums            | 0         | 4    | 6    | 6     | 0         | 5    | 5    | 1     | 0          | 10   | 30   | 2     | 0          | 3    | 30    | 3     | 105   |
| Total              | 0         | 83   | 794  | 239   | 0         | 94   | 314  | 64    | 0          | 207  | 819  | 119   | 0          | 251  | 1,100 | 63    | 4,147 |



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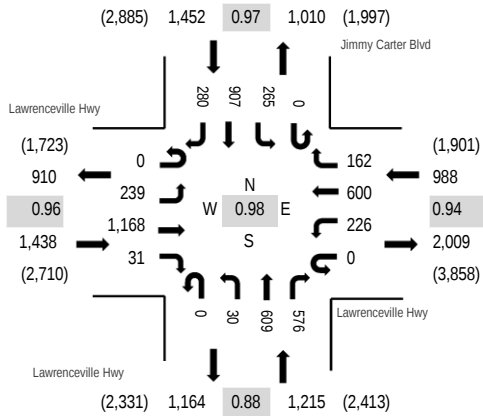
**Location:** 4 Mt Industria Blvd & Lawrenceville Hwy PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 04:45 PM - 05:45 PM

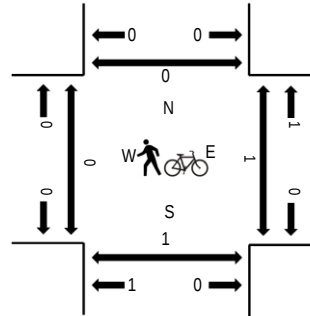
**Peak 15-Minutes:** 05:00 PM - 05:15 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Lawrenceville Hwy Eastbound |      |      |       | Lawrenceville Hwy Westbound |      |      |       | Mt Industria Blvd Northbound |      |      |       | Jimmy Carter Blvd Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------------------------|------|------|-------|------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                       | Left | Thru | Right | U-Turn                       | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                           | 51   | 254  | 11    | 0                           | 76   | 136  | 37    | 0                            | 10   | 155  | 128   | 0                            | 75   | 185  | 69    | 1,187 | 4,875           | 0                    | 0    | 0     | 0     |
| 4:15 PM                | 0                           | 53   | 241  | 9     | 0                           | 57   | 143  | 35    | 0                            | 7    | 177  | 140   | 0                            | 61   | 229  | 57    | 1,209 | 4,988           | 0                    | 0    | 0     | 0     |
| 4:30 PM                | 0                           | 50   | 251  | 6     | 0                           | 49   | 141  | 33    | 0                            | 10   | 150  | 140   | 0                            | 77   | 243  | 62    | 1,212 | 5,017           | 0                    | 0    | 0     | 0     |
| 4:45 PM                | 0                           | 63   | 305  | 8     | 0                           | 64   | 157  | 43    | 0                            | 12   | 136  | 131   | 0                            | 65   | 228  | 55    | 1,267 | 5,093           | 0                    | 0    | 1     | 0     |
| 5:00 PM                | 0                           | 61   | 265  | 7     | 0                           | 63   | 131  | 35    | 0                            | 6    | 173  | 178   | 0                            | 69   | 247  | 65    | 1,300 | 5,034           | 0                    | 0    | 0     | 0     |
| 5:15 PM                | 0                           | 47   | 297  | 11    | 0                           | 45   | 154  | 40    | 0                            | 7    | 162  | 134   | 0                            | 69   | 206  | 66    | 1,238 |                 | 0                    | 1    | 0     | 0     |
| 5:30 PM                | 0                           | 68   | 301  | 5     | 0                           | 54   | 158  | 44    | 0                            | 5    | 138  | 133   | 0                            | 62   | 226  | 94    | 1,288 |                 | 0                    | 0    | 0     | 0     |
| 5:45 PM                | 0                           | 55   | 281  | 10    | 0                           | 49   | 119  | 38    | 0                            | 13   | 153  | 115   | 0                            | 86   | 243  | 46    | 1,208 |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

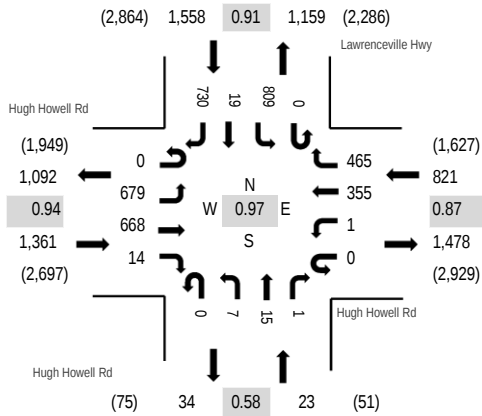
| Vehicle Type       | Eastbound |      |       |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|-------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru  | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 1    | 4     | 1     | 0         | 4    | 1    | 0     | 0          | 0    | 8    | 11    | 0          | 0    | 15   | 1     | 46    |
| Lights             | 0         | 236  | 1,148 | 30    | 0         | 213  | 592  | 156   | 0          | 30   | 583  | 557   | 0          | 259  | 869  | 278   | 4,951 |
| Mediums            | 0         | 2    | 16    | 0     | 0         | 9    | 7    | 6     | 0          | 0    | 18   | 8     | 0          | 6    | 23   | 1     | 96    |
| Total              | 0         | 239  | 1,168 | 31    | 0         | 226  | 600  | 162   | 0          | 30   | 609  | 576   | 0          | 265  | 907  | 280   | 5,093 |



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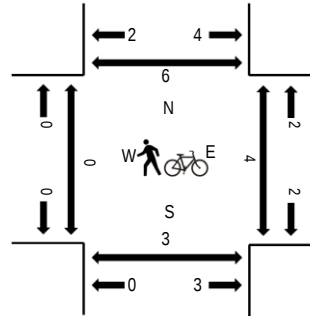
**Location:** 5 Drwy & Hugh Howell Rd PM  
**Date and Start Time:** Wednesday, May 11, 2016  
**Peak Hour:** 05:00 PM - 06:00 PM  
**Peak 15-Minutes:** 05:00 PM - 05:15 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Drwy<br>Northbound |      |      |       | Lawrenceville Hwy<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|--------------------|------|------|-------|---------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn             | Left | Thru | Right | U-Turn                          | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                           | 120  | 197  | 8     | 0                           | 0    | 91   | 140   | 0                  | 0    | 2    | 3     | 0                               | 149  | 7    | 132   | 849   | 3,476           | 0                    | 2    | 2     | 0     |
| 4:15 PM                | 0                           | 154  | 139  | 3     | 0                           | 0    | 82   | 114   | 0                  | 1    | 8    | 3     | 0                               | 202  | 8    | 129   | 843   | 3,599           | 1                    | 5    | 3     | 0     |
| 4:30 PM                | 0                           | 163  | 173  | 2     | 0                           | 2    | 80   | 129   | 0                  | 2    | 6    | 0     | 0                               | 184  | 1    | 133   | 875   | 3,680           | 0                    | 0    | 0     | 0     |
| 4:45 PM                | 0                           | 173  | 202  | 2     | 0                           | 0    | 52   | 116   | 0                  | 0    | 2    | 1     | 0                               | 198  | 8    | 155   | 909   | 3,746           | 2                    | 0    | 0     | 0     |
| 5:00 PM                | 0                           | 166  | 172  | 5     | 0                           | 0    | 98   | 138   | 0                  | 0    | 4    | 1     | 0                               | 217  | 1    | 170   | 972   | 3,763           | 0                    | 1    | 1     | 0     |
| 5:15 PM                | 0                           | 176  | 183  | 4     | 0                           | 1    | 85   | 118   | 0                  | 5    | 2    | 0     | 0                               | 161  | 4    | 185   | 924   |                 | 0                    | 0    | 0     | 5     |
| 5:30 PM                | 0                           | 162  | 158  | 3     | 0                           | 0    | 79   | 106   | 0                  | 2    | 3    | 0     | 0                               | 215  | 10   | 203   | 941   |                 | 0                    | 3    | 2     | 1     |
| 5:45 PM                | 0                           | 175  | 155  | 2     | 0                           | 0    | 93   | 103   | 0                  | 0    | 6    | 0     | 0                               | 216  | 4    | 172   | 926   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

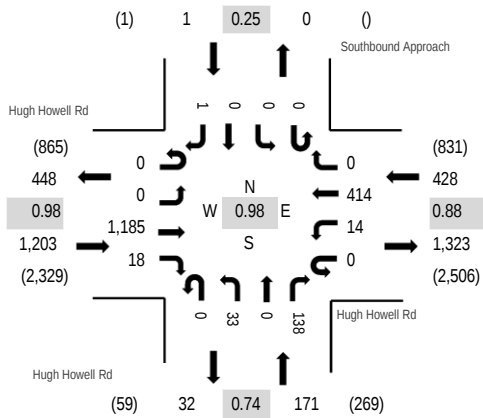
| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 3    | 1    | 0     | 0         | 0    | 4    | 1     | 0          | 0    | 0    | 0     | 0          | 4    | 0    | 4     | 17    |
| Lights             | 0         | 662  | 664  | 14    | 0         | 1    | 343  | 459   | 0          | 7    | 15   | 1     | 0          | 802  | 19   | 715   | 3,702 |
| Mediums            | 0         | 14   | 3    | 0     | 0         | 0    | 8    | 5     | 0          | 0    | 0    | 0     | 0          | 3    | 0    | 11    | 44    |
| Total              | 0         | 679  | 668  | 14    | 0         | 1    | 355  | 465   | 0          | 7    | 15   | 1     | 0          | 809  | 19   | 730   | 3,763 |



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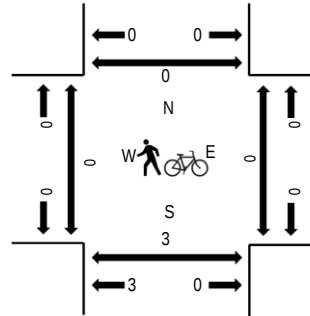
**Location:** 6 Flintstone Dr & Hugh Howell Rd PM  
**Date and Start Time:** Wednesday, May 11, 2016  
**Peak Hour:** 04:45 PM - 05:45 PM  
**Peak 15-Minutes:** 05:30 PM - 05:45 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Flintstone Dr<br>Northbound |      |      |       | Southbound Approach<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|-----------------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                            | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 1                           | 0    | 256  | 8     | 0                           | 2    | 106  | 0     | 0                           | 5    | 0    | 20    | 0                                 | 0    | 0    | 0     | 398   | 1,641           | 0                    | 0    | 0     | 0     |
| 4:15 PM                | 0                           | 0    | 252  | 6     | 0                           | 1    | 97   | 0     | 0                           | 5    | 0    | 17    | 0                                 | 0    | 0    | 0     | 378   | 1,687           | 0                    | 0    | 0     | 0     |
| 4:30 PM                | 0                           | 0    | 296  | 4     | 0                           | 2    | 95   | 0     | 0                           | 5    | 0    | 20    | 0                                 | 0    | 0    | 0     | 422   | 1,763           | 0                    | 0    | 0     | 0     |
| 4:45 PM                | 0                           | 0    | 279  | 6     | 0                           | 5    | 117  | 0     | 0                           | 8    | 0    | 28    | 0                                 | 0    | 0    | 0     | 443   | 1,803           | 0                    | 0    | 3     | 0     |
| 5:00 PM                | 0                           | 0    | 295  | 4     | 0                           | 5    | 81   | 0     | 0                           | 13   | 0    | 45    | 0                                 | 0    | 0    | 1     | 444   | 1,789           | 0                    | 0    | 0     | 0     |
| 5:15 PM                | 0                           | 0    | 306  | 5     | 0                           | 1    | 102  | 0     | 0                           | 6    | 0    | 34    | 0                                 | 0    | 0    | 0     | 454   |                 | 0                    | 0    | 0     | 0     |
| 5:30 PM                | 0                           | 0    | 305  | 3     | 0                           | 3    | 114  | 0     | 0                           | 6    | 0    | 31    | 0                                 | 0    | 0    | 0     | 462   |                 | 0                    | 0    | 0     | 0     |
| 5:45 PM                | 0                           | 0    | 301  | 2     | 0                           | 2    | 98   | 0     | 0                           | 5    | 0    | 21    | 0                                 | 0    | 0    | 0     | 429   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |       |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|-------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru  | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 1     | 0     | 0         | 0    | 1    | 0     | 0          | 1    | 0    | 0     | 0          | 0    | 0    | 0     | 3     |
| Lights             | 0         | 0    | 1,177 | 18    | 0         | 14   | 403  | 0     | 0          | 30   | 0    | 136   | 0          | 0    | 0    | 1     | 1,779 |
| Mediums            | 0         | 0    | 7     | 0     | 0         | 0    | 10   | 0     | 0          | 2    | 0    | 2     | 0          | 0    | 0    | 0     | 21    |
| Total              | 0         | 0    | 1,185 | 18    | 0         | 14   | 414  | 0     | 0          | 33   | 0    | 138   | 0          | 0    | 0    | 1     | 1,803 |



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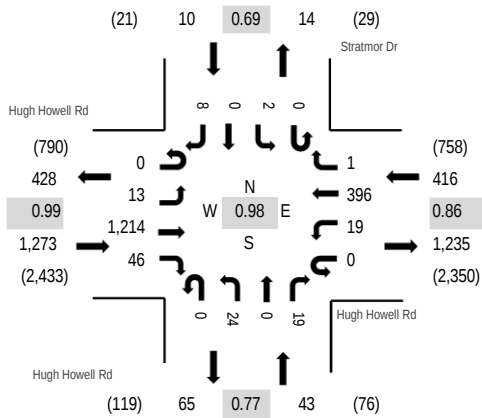
**Location:** 7 McCurdy Rd & Hugh Howell Rd PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 04:45 PM - 05:45 PM

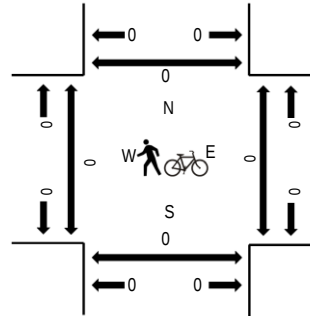
**Peak 15-Minutes:** 05:15 PM - 05:30 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | McCurdy Rd<br>Northbound |      |      |       | Stratmor Dr<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|--------------------------|------|------|-------|---------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                   | Left | Thru | Right | U-Turn                    | Left | Thru | Right |       |                 | West                 | East | South | North |
|                        |                             |      |      |       |                             |      |      |       |                          |      |      |       |                           |      |      |       |       |                 |                      |      |       |       |
| 4:00 PM                | 0                           | 4    | 253  | 11    | 0                           | 1    | 91   | 0     | 0                        | 12   | 0    | 4     | 0                         | 0    | 0    | 0     | 376   | 1,549           | 0                    | 0    | 0     | 0     |
| 4:15 PM                | 0                           | 3    | 228  | 12    | 0                           | 0    | 92   | 1     | 0                        | 2    | 0    | 2     | 0                         | 2    | 0    | 2     | 344   | 1,600           | 0                    | 0    | 2     | 0     |
| 4:30 PM                | 0                           | 2    | 298  | 14    | 0                           | 2    | 74   | 2     | 0                        | 5    | 0    | 3     | 0                         | 1    | 0    | 2     | 403   | 1,702           | 0                    | 0    | 0     | 0     |
| 4:45 PM                | 0                           | 5    | 273  | 10    | 0                           | 5    | 115  | 1     | 0                        | 10   | 0    | 4     | 0                         | 1    | 0    | 2     | 426   | 1,742           | 0                    | 0    | 0     | 0     |
| 5:00 PM                | 0                           | 1    | 322  | 10    | 0                           | 5    | 78   | 0     | 0                        | 5    | 0    | 5     | 0                         | 0    | 0    | 1     | 427   | 1,739           | 0                    | 0    | 0     | 0     |
| 5:15 PM                | 0                           | 4    | 319  | 12    | 0                           | 5    | 95   | 0     | 0                        | 5    | 0    | 4     | 0                         | 0    | 0    | 2     | 446   |                 | 0                    | 0    | 0     | 0     |
| 5:30 PM                | 0                           | 3    | 300  | 14    | 0                           | 4    | 108  | 0     | 0                        | 4    | 0    | 6     | 0                         | 1    | 0    | 3     | 443   |                 | 0                    | 0    | 0     | 0     |
| 5:45 PM                | 0                           | 3    | 322  | 10    | 0                           | 4    | 75   | 0     | 0                        | 4    | 0    | 1     | 0                         | 1    | 0    | 3     | 423   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |       |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|-------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru  | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 1     | 0     | 0         | 0    | 1    | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 2     |
| Lights             | 0         | 13   | 1,203 | 46    | 0         | 19   | 385  | 1     | 0          | 24   | 0    | 19    | 0          | 2    | 0    | 8     | 1,720 |
| Mediums            | 0         | 0    | 10    | 0     | 0         | 0    | 10   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 20    |
| Total              | 0         | 13   | 1,214 | 46    | 0         | 19   | 396  | 1     | 0          | 24   | 0    | 19    | 0          | 2    | 0    | 8     | 1,742 |



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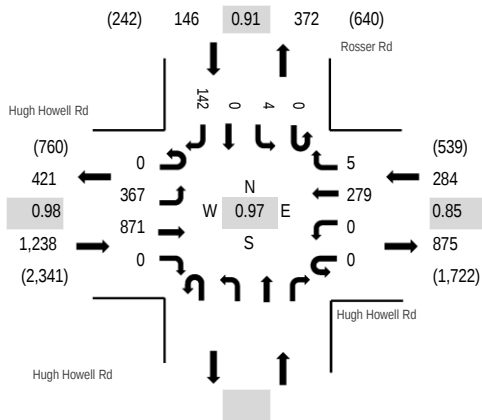
**Location:** 8 Rosser Rd & Hugh Howell Rd PM

**Date and Start Time:** Wednesday, May 11, 2016

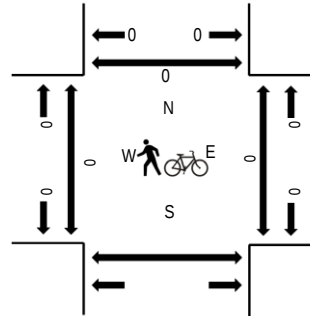
**Peak Hour:** 04:45 PM - 05:45 PM

**Peak 15-Minutes:** 05:15 PM - 05:30 PM

### Peak Hour - All Vehicles



### Peak Hour - Pedestrians/Bicycles in Crosswalk



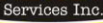
Note: Total study counts contained in parentheses.

### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Northbound |      |      |       | Rosser Rd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------|------|------|-------|-------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn                  | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                           | 49   | 200  | 0     | 0                           | 0    | 0    | 72    | 2          |      |      |       | 0                       | 1    | 0    | 22    | 346   | 1,474           | 0                    | 0    |       | 0     |
| 4:15 PM                | 0                           | 63   | 188  | 0     | 0                           | 0    | 0    | 64    | 2          |      |      |       | 0                       | 3    | 0    | 26    | 346   | 1,532           | 0                    | 0    |       | 0     |
| 4:30 PM                | 1                           | 73   | 208  | 0     | 0                           | 0    | 0    | 60    | 2          |      |      |       | 0                       | 1    | 0    | 19    | 364   | 1,617           | 0                    | 0    |       | 0     |
| 4:45 PM                | 0                           | 83   | 219  | 0     | 0                           | 0    | 0    | 77    | 1          |      |      |       | 0                       | 2    | 0    | 36    | 418   | 1,668           | 0                    | 0    |       | 0     |
| 5:00 PM                | 0                           | 94   | 219  | 0     | 0                           | 0    | 0    | 55    | 0          |      |      |       | 0                       | 2    | 0    | 34    | 404   | 1,648           | 0                    | 0    |       | 0     |
| 5:15 PM                | 0                           | 86   | 229  | 0     | 0                           | 0    | 0    | 81    | 3          |      |      |       | 0                       | 0    | 0    | 32    | 431   |                 | 0                    | 0    |       | 0     |
| 5:30 PM                | 0                           | 104  | 204  | 0     | 0                           | 0    | 0    | 66    | 1          |      |      |       | 0                       | 0    | 0    | 40    | 415   |                 | 0                    | 0    |       | 0     |
| 5:45 PM                | 0                           | 77   | 244  | 0     | 0                           | 0    | 0    | 53    | 0          |      |      |       | 0                       | 2    | 0    | 22    | 398   |                 | 0                    | 0    |       | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 0    | 1     | 0          |      |      |       | 0          | 0    | 0    | 0     | 1     |
| Lights             | 0         | 364  | 865  | 0     | 0         | 0    | 272  | 5     |            |      |      |       | 0          | 4    | 0    | 140   | 1,650 |
| Mediums            | 0         | 3    | 6    | 0     | 0         | 0    | 6    | 0     |            |      |      |       | 0          | 0    | 0    | 2     | 17    |
| Total              | 0         | 367  | 871  | 0     | 0         | 0    | 279  | 5     |            |      |      |       | 0          | 4    | 0    | 142   | 1,668 |



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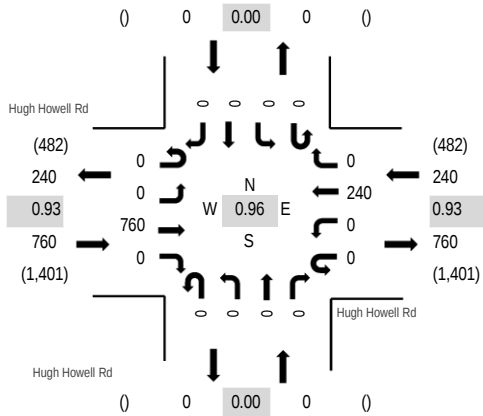
**Location:** 9 & Hugh Howell Rd PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 05:00 PM - 06:00 PM

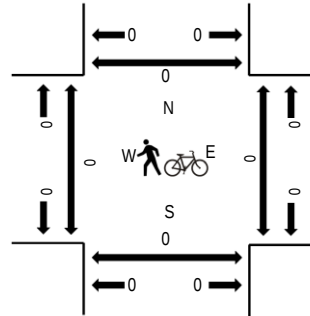
**Peak 15-Minutes:** 05:00 PM - 05:15 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



## Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |  |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|--|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |                 | West                 | East | South | North |  |
|                        |                             |      |      |       |                             |      |      |       |            |      |      |       |            |      |      |       |       |                 |                      |      |       |       |  |
| 4:00 PM                | 0                           | 0    | 169  | 0     | 0                           | 0    | 62   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 271   | 1,041           | 0                    | 0    | 0     | 0     |  |
| 4:15 PM                | 0                           | 0    | 147  | 0     | 0                           | 0    | 59   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 242   | 1,081           | 0                    | 0    | 0     | 0     |  |
| 4:30 PM                | 0                           | 0    | 165  | 0     | 0                           | 0    | 52   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 254   | 1,149           | 0                    | 0    | 0     | 0     |  |
| 4:45 PM                | 0                           | 0    | 160  | 0     | 0                           | 0    | 69   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 274   | 1,183           | 0                    | 0    | 0     | 0     |  |
| 5:00 PM                | 0                           | 0    | 212  | 0     | 0                           | 0    | 57   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 311   | 1,200           | 0                    | 0    | 0     | 0     |  |
| 5:15 PM                | 0                           | 0    | 203  | 0     | 0                           | 0    | 64   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 310   |                 | 0                    | 0    | 0     | 0     |  |
| 5:30 PM                | 0                           | 0    | 159  | 0     | 0                           | 0    | 66   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 288   |                 | 0                    | 0    | 0     | 0     |  |
| 5:45 PM                | 0                           | 0    | 186  | 0     | 0                           | 0    | 53   | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 291   |                 | 0                    | 0    | 0     | 0     |  |

### Peak Rolling Hour Flow Rates

[illegible]



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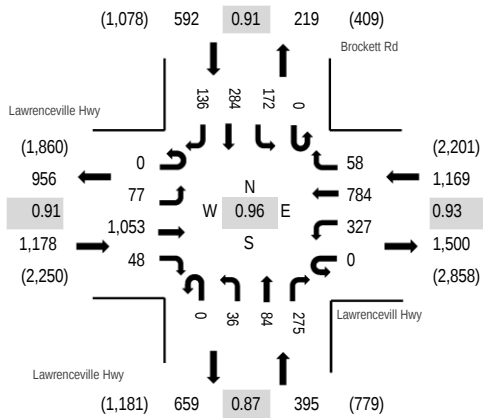
**Location:** 10 Brockett Rd & Lawrencevill Hwy PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 05:00 PM - 06:00 PM

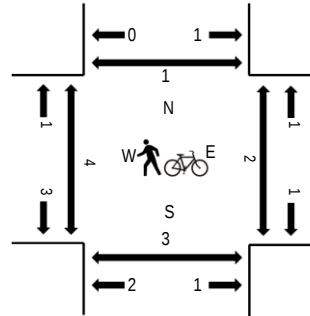
**Peak 15-Minutes:** 05:30 PM - 05:45 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Lawrenceville Hwy<br>Eastbound |      |      |       | Lawrencevill Hwy<br>Westbound |      |      |       | Brockett Rd<br>Northbound |      |      |       | Brockett Rd<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|--------------------------------|------|------|-------|-------------------------------|------|------|-------|---------------------------|------|------|-------|---------------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                         | Left | Thru | Right | U-Turn                        | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                    | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                              | 10   | 261  | 8     | 0                             | 63   | 186  | 13    | 0                         | 10   | 12   | 60    | 0                         | 31   | 45   | 23    | 722   | 2,974           | 1                    | 3    | 0     | 2     |
| 4:15 PM                | 0                              | 16   | 234  | 15    | 0                             | 63   | 167  | 16    | 0                         | 16   | 24   | 64    | 0                         | 34   | 56   | 42    | 747   | 3,058           | 1                    | 1    | 0     | 0     |
| 4:30 PM                | 0                              | 14   | 230  | 12    | 0                             | 62   | 208  | 16    | 0                         | 18   | 18   | 78    | 0                         | 22   | 56   | 27    | 761   | 3,135           | 0                    | 0    | 1     | 0     |
| 4:45 PM                | 0                              | 21   | 237  | 14    | 0                             | 48   | 172  | 18    | 0                         | 7    | 12   | 65    | 0                         | 42   | 80   | 28    | 744   | 3,241           | 0                    | 0    | 1     | 1     |
| 5:00 PM                | 0                              | 25   | 286  | 14    | 0                             | 71   | 164  | 15    | 0                         | 11   | 14   | 70    | 0                         | 36   | 71   | 29    | 806   | 3,334           | 0                    | 0    | 1     | 0     |
| 5:15 PM                | 0                              | 17   | 247  | 9     | 0                             | 83   | 193  | 16    | 0                         | 7    | 23   | 69    | 0                         | 45   | 81   | 34    | 824   |                 | 1                    | 1    | 2     | 0     |
| 5:30 PM                | 0                              | 14   | 261  | 12    | 0                             | 79   | 222  | 11    | 0                         | 8    | 23   | 69    | 0                         | 56   | 71   | 41    | 867   |                 | 2                    | 0    | 0     | 0     |
| 5:45 PM                | 0                              | 21   | 259  | 13    | 0                             | 94   | 205  | 16    | 0                         | 10   | 24   | 67    | 0                         | 35   | 61   | 32    | 837   |                 | 0                    | 0    | 0     | 1     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |       |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|-------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru  | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 3     | 0     | 0         | 0    | 4    | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 7     |
| Lights             | 0         | 77   | 1,028 | 46    | 0         | 325  | 760  | 54    | 0          | 35   | 83   | 274   | 0          | 169  | 282  | 134   | 3,267 |
| Mediums            | 0         | 0    | 22    | 2     | 0         | 2    | 20   | 4     | 0          | 1    | 1    | 1     | 0          | 3    | 2    | 2     | 60    |
| Total              | 0         | 77   | 1,053 | 48    | 0         | 327  | 784  | 58    | 0          | 36   | 84   | 275   | 0          | 172  | 284  | 136   | 3,334 |



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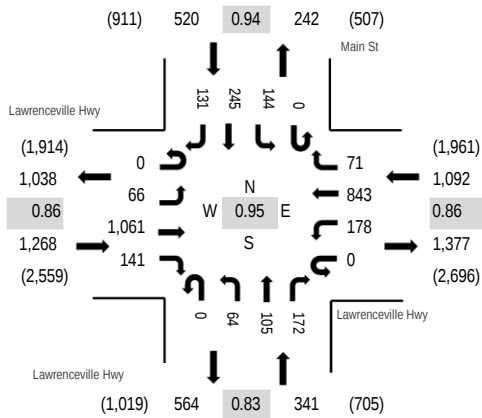
**Location:** 11 Idlewood Rd & Lawrenceville Hwy PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 05:00 PM - 06:00 PM

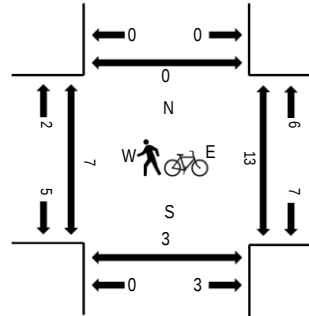
**Peak 15-Minutes:** 05:45 PM - 06:00 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Lawrenceville Hwy<br>Eastbound |      |      |       | Lawrenceville Hwy<br>Westbound |      |      |       | Idlewood Rd<br>Northbound |      |      |       | Main St<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|--------------------------------|------|------|-------|--------------------------------|------|------|-------|---------------------------|------|------|-------|-----------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                         | Left | Thru | Right | U-Turn                         | Left | Thru | Right | U-Turn                    | Left | Thru | Right | U-Turn                | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                              | 18   | 264  | 24    | 1                              | 25   | 180  | 18    | 0                         | 25   | 32   | 29    | 0                     | 31   | 40   | 34    | 721   | 2,915           | 10                   | 6    | 0     | 1     |
| 4:15 PM                | 0                              | 26   | 245  | 36    | 0                              | 39   | 183  | 15    | 0                         | 33   | 40   | 42    | 0                     | 22   | 33   | 29    | 743   | 2,968           | 12                   | 5    | 3     | 0     |
| 4:30 PM                | 0                              | 25   | 234  | 34    | 0                              | 32   | 141  | 15    | 0                         | 27   | 20   | 49    | 0                     | 32   | 44   | 24    | 677   | 3,043           | 6                    | 3    | 1     | 0     |
| 4:45 PM                | 0                              | 21   | 310  | 54    | 0                              | 51   | 161  | 8     | 0                         | 10   | 27   | 30    | 0                     | 30   | 43   | 29    | 774   | 3,143           | 4                    | 0    | 0     | 1     |
| 5:00 PM                | 0                              | 11   | 250  | 31    | 0                              | 42   | 179  | 17    | 0                         | 21   | 28   | 57    | 0                     | 39   | 69   | 30    | 774   | 3,221           | 0                    | 6    | 0     | 0     |
| 5:15 PM                | 0                              | 16   | 284  | 36    | 0                              | 40   | 222  | 17    | 0                         | 14   | 31   | 34    | 0                     | 41   | 60   | 23    | 818   |                 | 2                    | 2    | 3     | 0     |
| 5:30 PM                | 0                              | 15   | 262  | 34    | 0                              | 44   | 199  | 16    | 0                         | 12   | 23   | 45    | 0                     | 36   | 50   | 41    | 777   |                 | 3                    | 2    | 0     | 0     |
| 5:45 PM                | 0                              | 24   | 265  | 40    | 0                              | 52   | 243  | 21    | 0                         | 17   | 23   | 36    | 0                     | 28   | 66   | 37    | 852   |                 | 2                    | 3    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |       |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|-------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru  | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 2     | 0     | 0         | 1    | 7    | 0     | 0          | 0    | 0    | 0     | 0          | 1    | 0    | 0     | 11    |
| Lights             | 0         | 64   | 1,048 | 136   | 0         | 169  | 824  | 71    | 0          | 63   | 105  | 170   | 0          | 140  | 242  | 129   | 3,161 |
| Mediums            | 0         | 2    | 11    | 5     | 0         | 8    | 12   | 0     | 0          | 1    | 0    | 2     | 0          | 3    | 3    | 2     | 49    |
| Total              | 0         | 66   | 1,061 | 141   | 0         | 178  | 843  | 71    | 0          | 64   | 105  | 172   | 0          | 144  | 245  | 131   | 3,221 |



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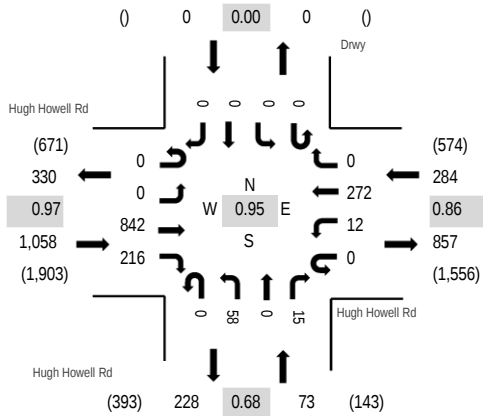
**Location:** 12 Silver Hill Rd & Hugh Howell Rd PM

**Date and Start Time:** Wednesday, May 11, 2016

**Peak Hour:** 05:00 PM - 06:00 PM

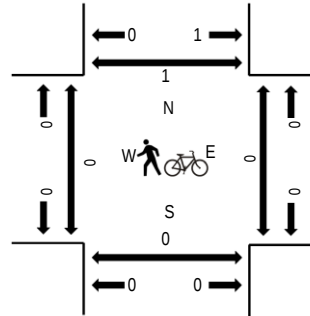
**Peak 15-Minutes:** 05:15 PM - 05:30 PM

### Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts

| Interval<br>Start Time | Hugh Howell Rd<br>Eastbound |      |      |       | Hugh Howell Rd<br>Westbound |      |      |       | Silver Hill Rd<br>Northbound |      |      |       | Drwy<br>Southbound |      |      |       | Total | Rolling<br>Hour | Pedestrian Crossings |      |       |       |
|------------------------|-----------------------------|------|------|-------|-----------------------------|------|------|-------|------------------------------|------|------|-------|--------------------|------|------|-------|-------|-----------------|----------------------|------|-------|-------|
|                        | U-Turn                      | Left | Thru | Right | U-Turn                      | Left | Thru | Right | U-Turn                       | Left | Thru | Right | U-Turn             | Left | Thru | Right |       |                 | West                 | East | South | North |
| 4:00 PM                | 0                           | 0    | 162  | 36    | 1                           | 4    | 72   | 0     | 0                            | 19   | 0    | 3     | 0                  | 0    | 0    | 0     | 297   | 1,205           | 0                    | 0    | 0     | 0     |
| 4:15 PM                | 0                           | 0    | 177  | 35    | 0                           | 2    | 66   | 0     | 0                            | 18   | 0    | 0     | 0                  | 0    | 0    | 0     | 298   | 1,237           | 0                    | 0    | 0     | 0     |
| 4:30 PM                | 0                           | 0    | 178  | 42    | 0                           | 2    | 54   | 0     | 0                            | 15   | 0    | 3     | 0                  | 0    | 0    | 0     | 294   | 1,310           | 0                    | 0    | 0     | 0     |
| 4:45 PM                | 0                           | 0    | 172  | 43    | 0                           | 1    | 88   | 0     | 0                            | 9    | 0    | 3     | 0                  | 0    | 0    | 0     | 316   | 1,373           | 0                    | 0    | 0     | 0     |
| 5:00 PM                | 0                           | 0    | 216  | 46    | 0                           | 2    | 57   | 0     | 0                            | 4    | 0    | 4     | 0                  | 0    | 0    | 0     | 329   | 1,415           | 0                    | 0    | 0     | 0     |
| 5:15 PM                | 0                           | 0    | 226  | 47    | 0                           | 1    | 76   | 0     | 0                            | 19   | 0    | 2     | 0                  | 0    | 0    | 0     | 371   |                 | 0                    | 0    | 0     | 0     |
| 5:30 PM                | 0                           | 0    | 190  | 70    | 0                           | 7    | 73   | 0     | 0                            | 14   | 0    | 3     | 0                  | 0    | 0    | 0     | 357   |                 | 0                    | 0    | 0     | 1     |
| 5:45 PM                | 0                           | 0    | 210  | 53    | 0                           | 2    | 66   | 0     | 0                            | 21   | 0    | 6     | 0                  | 0    | 0    | 0     | 358   |                 | 0                    | 0    | 0     | 0     |

### Peak Rolling Hour Flow Rates

| Vehicle Type       | Eastbound |      |      |       | Westbound |      |      |       | Northbound |      |      |       | Southbound |      |      |       | Total |
|--------------------|-----------|------|------|-------|-----------|------|------|-------|------------|------|------|-------|------------|------|------|-------|-------|
|                    | U-Turn    | Left | Thru | Right | U-Turn    | Left | Thru | Right | U-Turn     | Left | Thru | Right | U-Turn     | Left | Thru | Right |       |
| Articulated Trucks | 0         | 0    | 0    | 0     | 0         | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 0     |
| Lights             | 0         | 0    | 835  | 216   | 0         | 12   | 270  | 0     | 0          | 58   | 0    | 15    | 0          | 0    | 0    | 0     | 1,406 |
| Mediums            | 0         | 0    | 7    | 0     | 0         | 0    | 2    | 0     | 0          | 0    | 0    | 0     | 0          | 0    | 0    | 0     | 9     |
| Total              | 0         | 0    | 842  | 216   | 0         | 12   | 272  | 0     | 0          | 58   | 0    | 15    | 0          | 0    | 0    | 0     | 1,415 |

# All Traffic Data Service, Inc

1336 Farmer Road

Conyers, Ga 30012

404-374-1283

File Name : #12 SilverHillRd@HughHowellRdPM

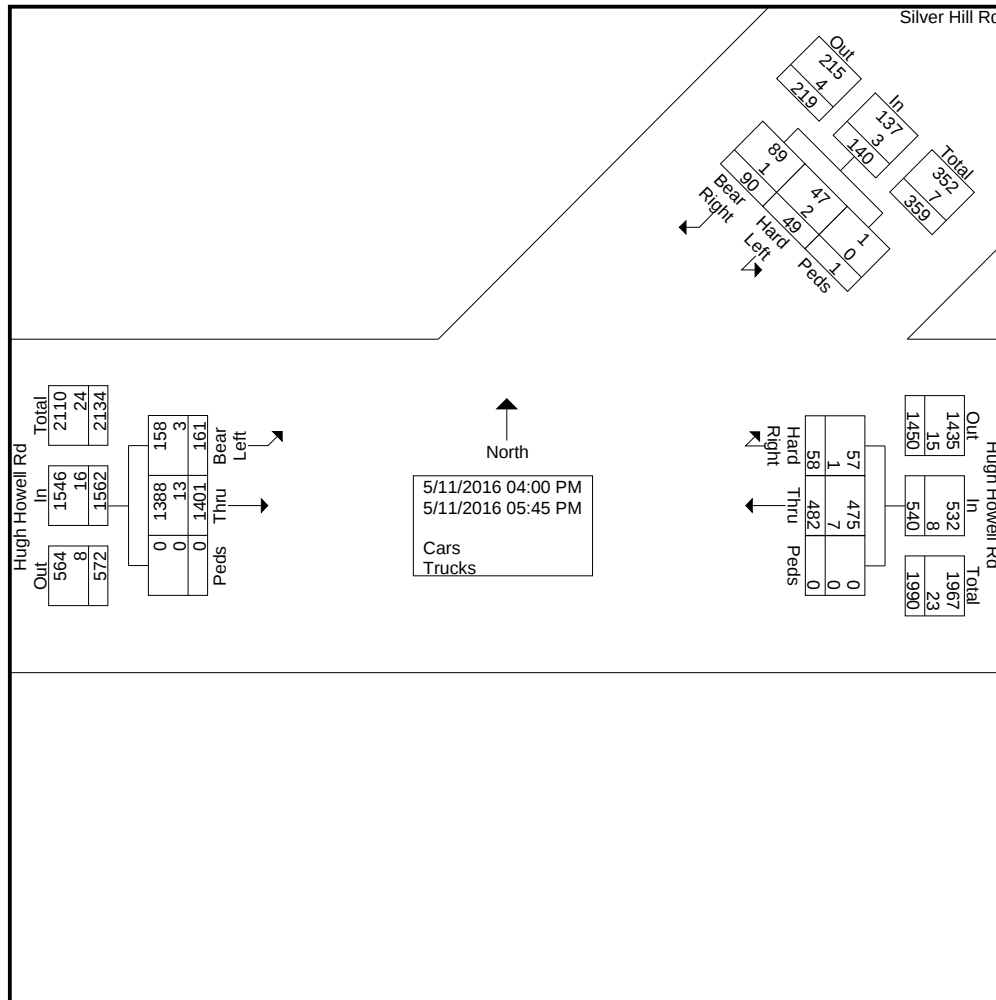
Site Code : 9

Start Date : 5/11/2016

Page No : 1

Groups Printed- Cars - Trucks

|             | Silver Hill Rd<br>Southwestbound |           |      |            | Hugh Howell Rd<br>Westbound |      |      |            | Hugh Howell Rd<br>Eastbound |           |      |            |            |
|-------------|----------------------------------|-----------|------|------------|-----------------------------|------|------|------------|-----------------------------|-----------|------|------------|------------|
| Start Time  | Bear Right                       | Hard Left | Peds | App. Total | Hard Right                  | Thru | Peds | App. Total | Thru                        | Bear Left | Peds | App. Total | Int. Total |
| 04:00 PM    | 12                               | 10        | 0    | 22         | 5                           | 62   | 0    | 67         | 169                         | 13        | 0    | 182        | 271        |
| 04:15 PM    | 8                                | 9         | 0    | 17         | 2                           | 59   | 0    | 61         | 147                         | 17        | 0    | 164        | 242        |
| 04:30 PM    | 6                                | 4         | 0    | 10         | 9                           | 52   | 0    | 61         | 165                         | 18        | 0    | 183        | 254        |
| 04:45 PM    | 15                               | 8         | 0    | 23         | 7                           | 69   | 0    | 76         | 160                         | 15        | 0    | 175        | 274        |
| Total       | 41                               | 31        | 0    | 72         | 23                          | 242  | 0    | 265        | 641                         | 63        | 0    | 704        | 1041       |
| 05:00 PM    | 9                                | 5         | 0    | 14         | 9                           | 57   | 0    | 66         | 212                         | 19        | 0    | 231        | 311        |
| 05:15 PM    | 13                               | 3         | 0    | 16         | 6                           | 64   | 0    | 70         | 203                         | 21        | 0    | 224        | 310        |
| 05:30 PM    | 20                               | 6         | 1    | 27         | 12                          | 66   | 0    | 78         | 159                         | 25        | 0    | 184        | 289        |
| 05:45 PM    | 7                                | 4         | 0    | 11         | 8                           | 53   | 0    | 61         | 186                         | 33        | 0    | 219        | 291        |
| Total       | 49                               | 18        | 1    | 68         | 35                          | 240  | 0    | 275        | 760                         | 98        | 0    | 858        | 1201       |
| Grand Total | 90                               | 49        | 1    | 140        | 58                          | 482  | 0    | 540        | 1401                        | 161       | 0    | 1562       | 2242       |
| Apprch %    | 64.3                             | 35        | 0.7  |            | 10.7                        | 89.3 | 0    |            | 89.7                        | 10.3      | 0    |            |            |
| Total %     | 4                                | 2.2       | 0    | 6.2        | 2.6                         | 21.5 | 0    | 24.1       | 62.5                        | 7.2       | 0    | 69.7       |            |
| Cars        | 89                               | 47        | 1    | 137        | 57                          | 475  | 0    | 532        | 1388                        | 158       | 0    | 1546       | 2215       |
| % Cars      | 98.9                             | 95.9      | 100  | 97.9       | 98.3                        | 98.5 | 0    | 98.5       | 99.1                        | 98.1      | 0    | 99         | 98.8       |
| Trucks      | 1                                | 2         | 0    | 3          | 1                           | 7    | 0    | 8          | 13                          | 3         | 0    | 16         | 27         |
| % Trucks    | 1.1                              | 4.1       | 0    | 2.1        | 1.7                         | 1.5  | 0    | 1.5        | 0.9                         | 1.9       | 0    | 1          | 1.2        |



# All Traffic Data Service, Inc

1336 Farmer Road

Conyers, Ga 30012

404-374-1283

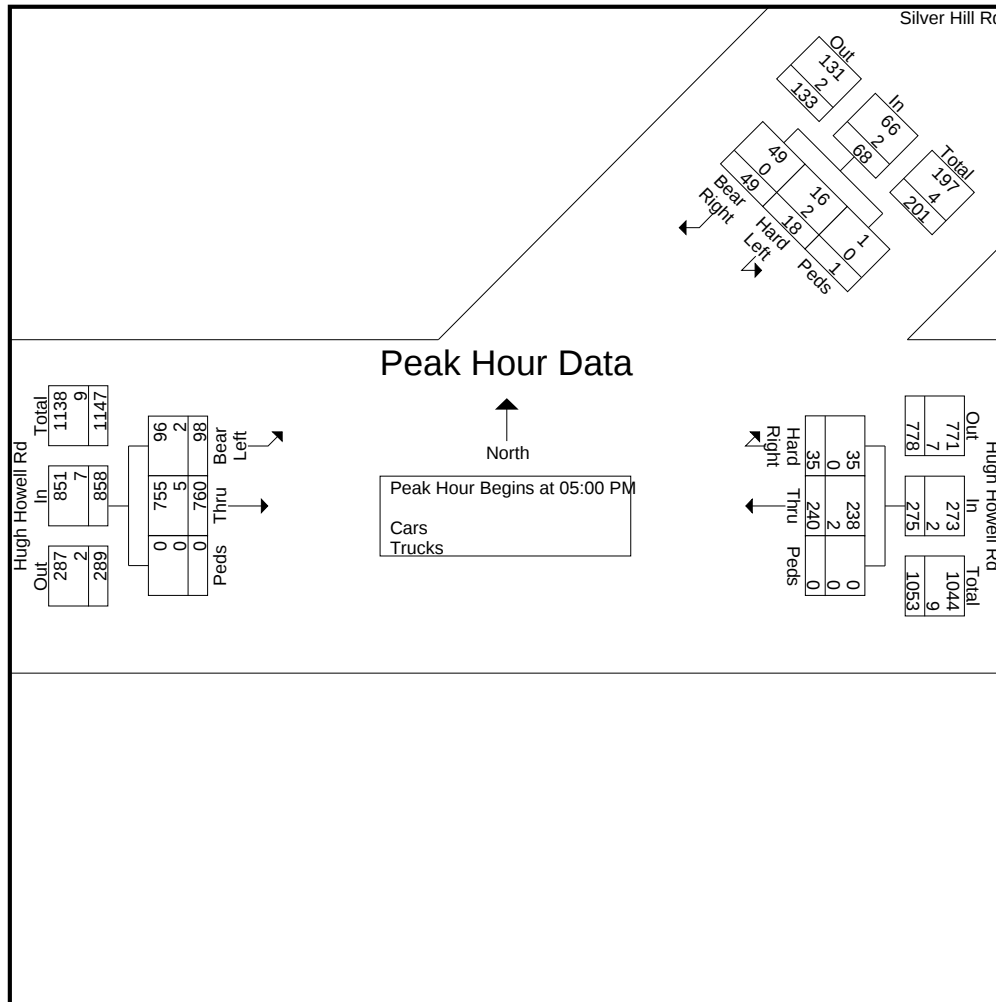
File Name : #12 SilverHillRd@HughHowellRdPM

Site Code : 9

Start Date : 5/11/2016

Page No : 2

|                                                            | Silver Hill Rd<br>Southwestbound |           |      |            | Hugh Howell Rd<br>Westbound |      |      |            | Hugh Howell Rd<br>Eastbound |           |      |            |            |
|------------------------------------------------------------|----------------------------------|-----------|------|------------|-----------------------------|------|------|------------|-----------------------------|-----------|------|------------|------------|
| Start Time                                                 | Bear Right                       | Hard Left | Peds | App. Total | Hard Right                  | Thru | Peds | App. Total | Thru                        | Bear Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                  |           |      |            |                             |      |      |            |                             |           |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                  |           |      |            |                             |      |      |            |                             |           |      |            |            |
| 05:00 PM                                                   | 9                                | 5         | 0    | 14         | 9                           | 57   | 0    | 66         | 212                         | 19        | 0    | 231        | 311        |
| 05:15 PM                                                   | 13                               | 3         | 0    | 16         | 6                           | 64   | 0    | 70         | 203                         | 21        | 0    | 224        | 310        |
| 05:30 PM                                                   | 20                               | 6         | 1    | 27         | 12                          | 66   | 0    | 78         | 159                         | 25        | 0    | 184        | 289        |
| 05:45 PM                                                   | 7                                | 4         | 0    | 11         | 8                           | 53   | 0    | 61         | 186                         | 33        | 0    | 219        | 291        |
| Total Volume                                               | 49                               | 18        | 1    | 68         | 35                          | 240  | 0    | 275        | 760                         | 98        | 0    | 858        | 1201       |
| % App. Total                                               | 72.1                             | 26.5      | 1.5  |            | 12.7                        | 87.3 | 0    |            | 88.6                        | 11.4      | 0    |            |            |
| PHF                                                        | .613                             | .750      | .250 | .630       | .729                        | .909 | .000 | .881       | .896                        | .742      | .000 | .929       | .965       |
| Cars                                                       | 49                               | 16        | 1    | 66         | 35                          | 238  | 0    | 273        | 755                         | 96        | 0    | 851        | 1190       |
| % Cars                                                     | 100                              | 88.9      | 100  | 97.1       | 100                         | 99.2 | 0    | 99.3       | 99.3                        | 98.0      | 0    | 99.2       | 99.1       |
| Trucks                                                     | 0                                | 2         | 0    | 2          | 0                           | 2    | 0    | 2          | 5                           | 2         | 0    | 7          | 11         |
| % Trucks                                                   | 0                                | 11.1      | 0    | 2.9        | 0                           | 0.8  | 0    | 0.7        | 0.7                         | 2.0       | 0    | 0.8        | 0.9        |



**Trip Generation Analysis  
Tucker Township DRI**

| Land Use                           | ITE Code                                 | Density                        | Daily Trips  | AM Peak Hour |            |             | PM Peak Hour |            |             |
|------------------------------------|------------------------------------------|--------------------------------|--------------|--------------|------------|-------------|--------------|------------|-------------|
|                                    |                                          |                                |              | Enter        | Exit       | Total       | Enter        | Exit       | Total       |
| Movie Studio                       | 150 - Warehousing                        | 450,000 SF Gross Floor Area    | 1797         | 149          | 40         | 189         | 39           | 117        | 156         |
| Multi Family                       | 220 - Apartment                          | 616 d.u.                       | 3857         | 61           | 245        | 306         | 231          | 125        | 356         |
| Park Cottages                      | 230 - Townhouse/Condominium              | 20 d.u.                        | 159          | 2            | 12         | 14          | 11           | 5          | 16          |
| Town Homes                         | 230 - Townhouse/Condominium              | 60 d.u.                        | 412          | 6            | 28         | 34          | 27           | 13         | 40          |
| CCRC                               | 255 - Constant Care Retirement Community | 360 units                      | 1439         | 43           | 23         | 66          | 27           | 43         | 70          |
| LTD Services Hotel                 | 310 - Hotel                              | 140 rooms                      | 880          | 44           | 30         | 74          | 43           | 41         | 84          |
| Amphitheatre                       | 441 - Live Theater                       | 500 seats                      |              |              |            |             | 5            | 5          | 10          |
| Adult/Child Care                   | 565 - Day Care                           | 20,000 SF gross floor area     | 1481         | 129          | 115        | 244         | 116          | 131        | 247         |
| Office                             | 710 - General Office                     | 28,000 SF Gross Floor Area     | 499          | 61           | 8          | 69          | 19           | 91         | 110         |
| Retail                             | 826 - Specialty Retail                   | 91,000 SF Gross Leaseable Area | 3931         |              |            |             | 106          | 134        | 240         |
| Grocery                            | 850 - Supermarket                        | 22,000 SF Gross Floor Area     | 2864         | 47           | 28         | 75          | 130          | 124        | 254         |
| <b>Gross Trips</b>                 |                                          |                                | <b>17319</b> | <b>542</b>   | <b>529</b> | <b>1071</b> | <b>754</b>   | <b>829</b> | <b>1583</b> |
| Residential Trips                  |                                          |                                | 5867         | 112          | 308        | 420         | 296          | 186        | 482         |
| Mixed Use Reductions               |                                          |                                | -2007        | -3           | -10        | -13         | -123         | -59        | -182        |
| Alternate Mode Reductions 5%       |                                          |                                | -193         | -5           | -15        | -20         | -9           | -6         | -15         |
| <b>Adjusted Residential Trips</b>  |                                          |                                | <b>3667</b>  | <b>104</b>   | <b>283</b> | <b>387</b>  | <b>164</b>   | <b>121</b> | <b>285</b>  |
| Office Trips                       |                                          |                                | 2296         | 210          | 48         | 258         | 58           | 208        | 266         |
| Mixed Use Reductions               |                                          |                                | -511         | -23          | -14        | -37         | -18          | -38        | -56         |
| Alternate Mode Reductions 5%       |                                          |                                | -89          | -9           | -2         | -11         | -2           | -9         | -11         |
| <b>Adjusted Office Trips</b>       |                                          |                                | <b>1696</b>  | <b>178</b>   | <b>32</b>  | <b>210</b>  | <b>38</b>    | <b>161</b> | <b>199</b>  |
| Retail/Other trips                 |                                          |                                | 9156         | 220          | 173        | 393         | 400          | 435        | 835         |
| Mixed Use Reductions               |                                          |                                | -2564        | -22          | -24        | -46         | -104         | -148       | -252        |
| Alternate Mode Reductions 5%       |                                          |                                | -330         | -10          | -7         | -17         | -15          | -14        | -29         |
| Pass By Reductions                 |                                          |                                | -2129        | 0            | 0          | 0           | -93          | -93        | -186        |
| <b>Adjusted Retail/Other Trips</b> |                                          |                                | <b>4133</b>  | <b>188</b>   | <b>142</b> | <b>330</b>  | <b>188</b>   | <b>180</b> | <b>368</b>  |
| Mixed-Use Reductions (Total)       |                                          |                                | -5082        | -48          | -48        | -96         | -245         | -245       | -490        |
| Alternate Mode Reductions (Total)  |                                          |                                | -612         | -24          | -24        | -48         | -26          | -29        | -55         |
| Pass-By Reductions (Total)         |                                          |                                | -2129        | 0            | 0          | 0           | -93          | -93        | -186        |
| <b>Net New Vehicle Trips</b>       |                                          |                                | <b>9496</b>  | <b>470</b>   | <b>457</b> | <b>927</b>  | <b>390</b>   | <b>462</b> | <b>852</b>  |

| NCHRP 684 Internal Trip Capture Estimation Tool |                     |  |  |               |                     |
|-------------------------------------------------|---------------------|--|--|---------------|---------------------|
| Project Name:                                   | Tucker Township     |  |  | Organization: | Lowe Engineers, LLC |
| Project Location:                               | Tucker, Georgia     |  |  | Performed By: | RJM                 |
| Scenario Description:                           |                     |  |  | Date:         | 5/25/2016           |
| Analysis Year:                                  |                     |  |  | Checked By:   |                     |
| Analysis Period:                                | AM Street Peak Hour |  |  | Date:         |                     |

| Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate) |                                         |          |       |                                      |          |         |
|------------------------------------------------------------------------------|-----------------------------------------|----------|-------|--------------------------------------|----------|---------|
| Land Use                                                                     | Development Data (For Information Only) |          |       | Estimated Vehicle-Trips <sup>3</sup> |          |         |
|                                                                              | ITE LUCs <sup>1</sup>                   | Quantity | Units | Total                                | Entering | Exiting |
| Office                                                                       | 150,710                                 | Var      |       | 258                                  | 210      | 48      |
| Retail                                                                       | 826,850                                 | Var      |       | 319                                  | 176      | 143     |
| Restaurant                                                                   |                                         |          |       | 0                                    |          |         |
| Cinema/Entertainment                                                         |                                         |          |       | 0                                    |          |         |
| Residential                                                                  | 220,230,255                             | Var      |       | 420                                  | 112      | 308     |
| Hotel                                                                        | 310                                     | Var      |       | 74                                   | 44       | 30      |
| All Other Land Uses <sup>2</sup>                                             |                                         |          |       | 0                                    |          |         |
|                                                                              |                                         |          |       | 1,071                                | 542      | 529     |

| Table 2-A: Mode Split and Vehicle Occupancy Estimates |                        |           |                 |                        |           |                 |
|-------------------------------------------------------|------------------------|-----------|-----------------|------------------------|-----------|-----------------|
| Land Use                                              | Entering Trips         |           |                 | Exiting Trips          |           |                 |
|                                                       | Veh. Occ. <sup>4</sup> | % Transit | % Non-Motorized | Veh. Occ. <sup>4</sup> | % Transit | % Non-Motorized |
| Office                                                | 1.06                   | 5%        | 0%              | 1.06                   | 5%        | 0%              |
| Retail                                                | 1.17                   | 5%        | 0%              | 1.16                   | 5%        | 0%              |
| Restaurant                                            |                        | 5%        | 0%              |                        | 5%        | 0%              |
| Cinema/Entertainment                                  |                        | 5%        | 0%              |                        | 5%        | 0%              |
| Residential                                           | 1.13                   | 5%        | 0%              | 1.13                   | 5%        | 0%              |
| Hotel                                                 | 1.26                   | 5%        | 0%              | 1.26                   | 5%        | 0%              |
| All Other Land Uses <sup>2</sup>                      |                        | 5%        | 0%              |                        | 5%        | 0%              |

| Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance) |                  |        |            |                      |             |       |
|---------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                             | Destination (To) |        |            |                      |             |       |
|                                                                           | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                    |                  |        |            |                      |             |       |
| Retail                                                                    |                  |        |            |                      |             |       |
| Restaurant                                                                |                  |        |            |                      |             |       |
| Cinema/Entertainment                                                      |                  |        |            |                      |             |       |
| Residential                                                               |                  |        |            |                      |             |       |
| Hotel                                                                     |                  |        |            |                      |             |       |

| Table 4-A: Internal Person-Trip Origin-Destination Matrix* |                  |        |            |                      |             |       |
|------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                              | Destination (To) |        |            |                      |             |       |
|                                                            | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                     |                  | 14     | 0          | 0                    | 0           | 0     |
| Retail                                                     | 9                |        | 0          | 0                    | 3           | 0     |
| Restaurant                                                 | 0                | 0      |            | 0                    | 0           | 0     |
| Cinema/Entertainment                                       | 0                | 0      | 0          |                      | 0           | 0     |
| Residential                                                | 7                | 3      | 0          | 0                    |             | 0     |
| Hotel                                                      | 7                | 5      | 0          | 0                    | 0           |       |

| Table 5-A: Computations Summary           |       |          |         |
|-------------------------------------------|-------|----------|---------|
|                                           | Total | Entering | Exiting |
| All Person-Trips                          | 1,214 | 611      | 603     |
| Internal Capture Percentage               | 8%    | 8%       | 8%      |
| External Vehicle-Trips <sup>5</sup>       | 937   | 474      | 463     |
| External Transit-Trips <sup>6</sup>       | 56    | 28       | 28      |
| External Non-Motorized Trips <sup>6</sup> | 0     | 0        | 0       |

| Table 6-A: Internal Trip Capture Percentages by Land Use |                |               |
|----------------------------------------------------------|----------------|---------------|
| Land Use                                                 | Entering Trips | Exiting Trips |
| Office                                                   | 10%            | 27%           |
| Retail                                                   | 11%            | 7%            |
| Restaurant                                               | N/A            | N/A           |
| Cinema/Entertainment                                     | N/A            | N/A           |
| Residential                                              | 2%             | 3%            |
| Hotel                                                    | 0%             | 32%           |

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

<sup>3</sup>Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

<sup>4</sup>Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

<sup>5</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

<sup>6</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

|                         |                     |
|-------------------------|---------------------|
| <b>Project Name:</b>    | Tucker Township     |
| <b>Analysis Period:</b> | AM Street Peak Hour |

| Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends |                               |               |               |                              |               |               |
|----------------------------------------------------------------|-------------------------------|---------------|---------------|------------------------------|---------------|---------------|
| Land Use                                                       | Table 7-A (D): Entering Trips |               |               | Table 7-A (O): Exiting Trips |               |               |
|                                                                | Veh. Occ.                     | Vehicle-Trips | Person-Trips* | Veh. Occ.                    | Vehicle-Trips | Person-Trips* |
| Office                                                         | 1.06                          | 210           | 223           | 1.06                         | 48            | 51            |
| Retail                                                         | 1.17                          | 176           | 206           | 1.16                         | 143           | 166           |
| Restaurant                                                     | 1.00                          | 0             | 0             | 1.00                         | 0             | 0             |
| Cinema/Entertainment                                           | 1.00                          | 0             | 0             | 1.00                         | 0             | 0             |
| Residential                                                    | 1.13                          | 112           | 127           | 1.13                         | 308           | 348           |
| Hotel                                                          | 1.26                          | 44            | 55            | 1.26                         | 30            | 38            |

| Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin) |                  |        |            |                      |             |       |
|------------------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                                      | Destination (To) |        |            |                      |             |       |
|                                                                                    | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                             |                  | 14     | 32         | 0                    | 1           | 0     |
| Retail                                                                             | 48               |        | 22         | 0                    | 23          | 0     |
| Restaurant                                                                         | 0                | 0      |            | 0                    | 0           | 0     |
| Cinema/Entertainment                                                               | 0                | 0      | 0          |                      | 0           | 0     |
| Residential                                                                        | 7                | 3      | 70         | 0                    |             | 0     |
| Hotel                                                                              | 29               | 5      | 3          | 0                    | 0           |       |

| Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination) |                  |        |            |                      |             |       |
|-----------------------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                                           | Destination (To) |        |            |                      |             |       |
|                                                                                         | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                                  |                  | 66     | 0          | 0                    | 0           | 0     |
| Retail                                                                                  | 9                |        | 0          | 0                    | 3           | 0     |
| Restaurant                                                                              | 31               | 16     |            | 0                    | 6           | 2     |
| Cinema/Entertainment                                                                    | 0                | 0      | 0          |                      | 0           | 0     |
| Residential                                                                             | 7                | 35     | 0          | 0                    |             | 0     |
| Hotel                                                                                   | 7                | 8      | 0          | 0                    | 0           |       |

| Table 9-A (D): Internal and External Trips Summary (Entering Trips) |                       |          |       |                         |                      |                            |
|---------------------------------------------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Destination Land Use                                                | Person-Trip Estimates |          |       | External Trips by Mode* |                      |                            |
|                                                                     | Internal              | External | Total | Vehicles <sup>1</sup>   | Transit <sup>2</sup> | Non-Motorized <sup>2</sup> |
| Office                                                              | 23                    | 200      | 223   | 179                     | 10                   | 0                          |
| Retail                                                              | 22                    | 184      | 206   | 150                     | 9                    | 0                          |
| Restaurant                                                          | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Cinema/Entertainment                                                | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Residential                                                         | 3                     | 124      | 127   | 104                     | 6                    | 0                          |
| Hotel                                                               | 0                     | 55       | 55    | 41                      | 3                    | 0                          |
| All Other Land Uses <sup>3</sup>                                    | 0                     | 0        | 0     | 0                       | 0                    | 0                          |

| Table 9-A (O): Internal and External Trips Summary (Exiting Trips) |                       |          |       |                         |                      |                            |
|--------------------------------------------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Origin Land Use                                                    | Person-Trip Estimates |          |       | External Trips by Mode* |                      |                            |
|                                                                    | Internal              | External | Total | Vehicles <sup>1</sup>   | Transit <sup>2</sup> | Non-Motorized <sup>2</sup> |
| Office                                                             | 14                    | 37       | 51    | 33                      | 2                    | 0                          |
| Retail                                                             | 12                    | 154      | 166   | 126                     | 8                    | 0                          |
| Restaurant                                                         | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Cinema/Entertainment                                               | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Residential                                                        | 10                    | 338      | 348   | 284                     | 17                   | 0                          |
| Hotel                                                              | 12                    | 26       | 38    | 20                      | 1                    | 0                          |
| All Other Land Uses <sup>3</sup>                                   | 0                     | 0        | 0     | 0                       | 0                    | 0                          |

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

<sup>2</sup>Person-Trips

<sup>3</sup>Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

\*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 684 Internal Trip Capture Estimation Tool |                     |  |  |               |                     |
|-------------------------------------------------|---------------------|--|--|---------------|---------------------|
| Project Name:                                   | Tucker Township     |  |  | Organization: | Lowe Engineers, LLC |
| Project Location:                               | Tucker, Georgia     |  |  | Performed By: | RJM                 |
| Scenario Description:                           |                     |  |  | Date:         | 5/25/2016           |
| Analysis Year:                                  |                     |  |  | Checked By:   |                     |
| Analysis Period:                                | PM Street Peak Hour |  |  | Date:         |                     |

| Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate) |                                         |          |       |                                      |          |         |
|------------------------------------------------------------------------------|-----------------------------------------|----------|-------|--------------------------------------|----------|---------|
| Land Use                                                                     | Development Data (For Information Only) |          |       | Estimated Vehicle-Trips <sup>3</sup> |          |         |
|                                                                              | ITE LUCs <sup>1</sup>                   | Quantity | Units | Total                                | Entering | Exiting |
| Office                                                                       | 150,710                                 | Var      |       | 266                                  | 58       | 208     |
| Retail                                                                       | 826,850                                 | Var      |       | 741                                  | 352      | 389     |
| Restaurant                                                                   |                                         |          |       | 0                                    |          |         |
| Cinema/Entertainment                                                         |                                         |          |       | 10                                   | 5        | 5       |
| Residential                                                                  | 220,230,255                             | Var      |       | 482                                  | 296      | 186     |
| Hotel                                                                        | 310                                     | Var      |       | 84                                   | 43       | 41      |
| All Other Land Uses <sup>2</sup>                                             |                                         |          |       | 0                                    |          |         |
|                                                                              |                                         |          |       | 1,583                                | 754      | 829     |

| Table 2-P: Mode Split and Vehicle Occupancy Estimates |                        |           |                 |                        |           |                 |
|-------------------------------------------------------|------------------------|-----------|-----------------|------------------------|-----------|-----------------|
| Land Use                                              | Entering Trips         |           |                 | Exiting Trips          |           |                 |
|                                                       | Veh. Occ. <sup>4</sup> | % Transit | % Non-Motorized | Veh. Occ. <sup>4</sup> | % Transit | % Non-Motorized |
| Office                                                | 1.11                   | 5%        |                 | 1.07                   | 5%        |                 |
| Retail                                                | 1.21                   | 5%        |                 | 1.18                   | 5%        |                 |
| Restaurant                                            |                        | 5%        |                 |                        | 5%        |                 |
| Cinema/Entertainment                                  |                        | 5%        |                 |                        | 5%        |                 |
| Residential                                           | 1.15                   | 5%        |                 | 1.21                   | 5%        |                 |
| Hotel                                                 | 1.31                   | 5%        |                 | 1.30                   | 5%        |                 |
| All Other Land Uses <sup>2</sup>                      |                        | 5%        |                 |                        | 5%        |                 |

| Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance) |                  |        |            |                      |             |       |
|---------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                             | Destination (To) |        |            |                      |             |       |
|                                                                           | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                    |                  |        |            |                      |             |       |
| Retail                                                                    |                  |        |            |                      |             |       |
| Restaurant                                                                |                  |        |            |                      |             |       |
| Cinema/Entertainment                                                      |                  |        |            |                      |             |       |
| Residential                                                               |                  |        |            |                      |             |       |
| Hotel                                                                     |                  |        |            |                      |             |       |

| Table 4-P: Internal Person-Trip Origin-Destination Matrix* |                  |        |            |                      |             |       |
|------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                              | Destination (To) |        |            |                      |             |       |
|                                                            | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                     |                  | 34     | 0          | 0                    | 4           | 0     |
| Retail                                                     | 9                |        | 0          | 1                    | 119         | 10    |
| Restaurant                                                 | 0                | 0      |            | 0                    | 0           | 0     |
| Cinema/Entertainment                                       | 0                | 1      | 0          |                      | 0           | 0     |
| Residential                                                | 9                | 43     | 0          | 0                    |             | 7     |
| Hotel                                                      | 0                | 8      | 0          | 0                    | 0           |       |

| Table 5-P: Computations Summary           |       |          |         |
|-------------------------------------------|-------|----------|---------|
|                                           | Total | Entering | Exiting |
| All Person-Trips                          | 1,856 | 891      | 965     |
| Internal Capture Percentage               | 26%   | 27%      | 25%     |
| External Vehicle-Trips <sup>5</sup>       | 1,108 | 518      | 590     |
| External Transit-Trips <sup>6</sup>       | 67    | 32       | 35      |
| External Non-Motorized Trips <sup>6</sup> | 0     | 0        | 0       |

| Table 6-P: Internal Trip Capture Percentages by Land Use |                |               |
|----------------------------------------------------------|----------------|---------------|
| Land Use                                                 | Entering Trips | Exiting Trips |
| Office                                                   | 28%            | 17%           |
| Retail                                                   | 20%            | 30%           |
| Restaurant                                               | N/A            | N/A           |
| Cinema/Entertainment                                     | 20%            | 20%           |
| Residential                                              | 36%            | 26%           |
| Hotel                                                    | 30%            | 15%           |

|                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <sup>1</sup> Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.                                  |
| <sup>2</sup> Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.        |
| <sup>3</sup> Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i> ).                                          |
| <sup>4</sup> Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be |
| <sup>5</sup> Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.                                                     |
| <sup>6</sup> Person-Trips                                                                                                                                        |
| *Indicates computation that has been rounded to the nearest whole number.                                                                                        |
| Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1                                                                             |

|                         |                     |
|-------------------------|---------------------|
| <b>Project Name:</b>    | Tucker Township     |
| <b>Analysis Period:</b> | PM Street Peak Hour |

| Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends |                               |               |               |                              |               |               |
|----------------------------------------------------------------|-------------------------------|---------------|---------------|------------------------------|---------------|---------------|
| Land Use                                                       | Table 7-P (D): Entering Trips |               |               | Table 7-P (O): Exiting Trips |               |               |
|                                                                | Veh. Occ.                     | Vehicle-Trips | Person-Trips* | Veh. Occ.                    | Vehicle-Trips | Person-Trips* |
| Office                                                         | 1.11                          | 58            | 64            | 1.07                         | 208           | 223           |
| Retail                                                         | 1.21                          | 352           | 426           | 1.18                         | 389           | 459           |
| Restaurant                                                     | 1.00                          | 0             | 0             | 1.00                         | 0             | 0             |
| Cinema/Entertainment                                           | 1.00                          | 5             | 5             | 1.00                         | 5             | 5             |
| Residential                                                    | 1.15                          | 296           | 340           | 1.21                         | 186           | 225           |
| Hotel                                                          | 1.31                          | 43            | 56            | 1.30                         | 41            | 53            |

| Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin) |                  |        |            |                      |             |       |
|------------------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                                      | Destination (To) |        |            |                      |             |       |
|                                                                                    | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                             |                  | 45     | 9          | 0                    | 4           | 0     |
| Retail                                                                             | 9                |        | 133        | 18                   | 119         | 23    |
| Restaurant                                                                         | 0                | 0      |            | 0                    | 0           | 0     |
| Cinema/Entertainment                                                               | 0                | 1      | 2          |                      | 0           | 0     |
| Residential                                                                        | 9                | 95     | 47         | 0                    |             | 7     |
| Hotel                                                                              | 0                | 8      | 36         | 0                    | 1           |       |

| Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination) |                  |        |            |                      |             |       |
|-----------------------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                                           | Destination (To) |        |            |                      |             |       |
|                                                                                         | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                                  |                  | 34     | 0          | 0                    | 14          | 0     |
| Retail                                                                                  | 20               |        | 0          | 1                    | 156         | 10    |
| Restaurant                                                                              | 19               | 213    |            | 2                    | 54          | 40    |
| Cinema/Entertainment                                                                    | 4                | 17     | 0          |                      | 14          | 1     |
| Residential                                                                             | 36               | 43     | 0          | 0                    |             | 7     |
| Hotel                                                                                   | 0                | 9      | 0          | 0                    | 0           |       |

| Table 9-P (D): Internal and External Trips Summary (Entering Trips) |                       |          |       |                         |                      |                            |
|---------------------------------------------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Destination Land Use                                                | Person-Trip Estimates |          |       | External Trips by Mode* |                      |                            |
|                                                                     | Internal              | External | Total | Vehicles <sup>1</sup>   | Transit <sup>2</sup> | Non-Motorized <sup>2</sup> |
| Office                                                              | 18                    | 46       | 64    | 40                      | 2                    | 0                          |
| Retail                                                              | 86                    | 340      | 426   | 267                     | 17                   | 0                          |
| Restaurant                                                          | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Cinema/Entertainment                                                | 1                     | 4        | 5     | 4                       | 0                    | 0                          |
| Residential                                                         | 123                   | 217      | 340   | 179                     | 11                   | 0                          |
| Hotel                                                               | 17                    | 39       | 56    | 28                      | 2                    | 0                          |
| All Other Land Uses <sup>3</sup>                                    | 0                     | 0        | 0     | 0                       | 0                    | 0                          |

| Table 9-P (O): Internal and External Trips Summary (Exiting Trips) |                       |          |       |                         |                      |                            |
|--------------------------------------------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Origin Land Use                                                    | Person-Trip Estimates |          |       | External Trips by Mode* |                      |                            |
|                                                                    | Internal              | External | Total | Vehicles <sup>1</sup>   | Transit <sup>2</sup> | Non-Motorized <sup>2</sup> |
| Office                                                             | 38                    | 185      | 223   | 164                     | 9                    | 0                          |
| Retail                                                             | 139                   | 320      | 459   | 258                     | 16                   | 0                          |
| Restaurant                                                         | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Cinema/Entertainment                                               | 1                     | 4        | 5     | 4                       | 0                    | 0                          |
| Residential                                                        | 59                    | 166      | 225   | 131                     | 8                    | 0                          |
| Hotel                                                              | 8                     | 45       | 53    | 33                      | 2                    | 0                          |
| All Other Land Uses <sup>3</sup>                                   | 0                     | 0        | 0     | 0                       | 0                    | 0                          |

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>2</sup>Person-Trips

<sup>3</sup>Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

\*Indicates computation that has been rounded to the nearest whole number.

| Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development |                         |              |              |
|-------------------------------------------------------------------------------------------------|-------------------------|--------------|--------------|
| Land Use Pairs                                                                                  |                         | Weekday      |              |
|                                                                                                 |                         | AM Peak Hour | PM Peak Hour |
| From OFFICE                                                                                     | To Office               | 0.0%         | 0.0%         |
|                                                                                                 | To Retail               | 28.0%        | 20.0%        |
|                                                                                                 | To Restaurant           | 63.0%        | 4.0%         |
|                                                                                                 | To Cinema/Entertainment | 0.0%         | 0.0%         |
|                                                                                                 | To Residential          | 1.0%         | 2.0%         |
|                                                                                                 | To Hotel                | 0.0%         | 0.0%         |
| From RETAIL                                                                                     | To Office               | 29.0%        | 2.0%         |
|                                                                                                 | To Retail               | 0.0%         | 0.0%         |
|                                                                                                 | To Restaurant           | 13.0%        | 29.0%        |
|                                                                                                 | To Cinema/Entertainment | 0.0%         | 4.0%         |
|                                                                                                 | To Residential          | 14.0%        | 26.0%        |
|                                                                                                 | To Hotel                | 0.0%         | 5.0%         |
| From RESTAURANT                                                                                 | To Office               | 31.0%        | 3.0%         |
|                                                                                                 | To Retail               | 14.0%        | 41.0%        |
|                                                                                                 | To Restaurant           | 0.0%         | 0.0%         |
|                                                                                                 | To Cinema/Entertainment | 0.0%         | 8.0%         |
|                                                                                                 | To Residential          | 4.0%         | 18.0%        |
|                                                                                                 | To Hotel                | 3.0%         | 7.0%         |
| From CINEMA/ENTERTAINMENT                                                                       | To Office               | 0.0%         | 2.0%         |
|                                                                                                 | To Retail               | 0.0%         | 21.0%        |
|                                                                                                 | To Restaurant           | 0.0%         | 31.0%        |
|                                                                                                 | To Cinema/Entertainment | 0.0%         | 0.0%         |
|                                                                                                 | To Residential          | 0.0%         | 8.0%         |
|                                                                                                 | To Hotel                | 0.0%         | 2.0%         |
| From RESIDENTIAL                                                                                | To Office               | 2.0%         | 4.0%         |
|                                                                                                 | To Retail               | 1.0%         | 42.0%        |
|                                                                                                 | To Restaurant           | 20.0%        | 21.0%        |
|                                                                                                 | To Cinema/Entertainment | 0.0%         | 0.0%         |
|                                                                                                 | To Residential          | 0.0%         | 0.0%         |
|                                                                                                 | To Hotel                | 0.0%         | 3.0%         |
| From HOTEL                                                                                      | To Office               | 75.0%        | 0.0%         |
|                                                                                                 | To Retail               | 14.0%        | 16.0%        |
|                                                                                                 | To Restaurant           | 9.0%         | 68.0%        |
|                                                                                                 | To Cinema/Entertainment | 0.0%         | 0.0%         |
|                                                                                                 | To Residential          | 0.0%         | 2.0%         |
|                                                                                                 | To Hotel                | 0.0%         | 0.0%         |

| NCHRP 684 Internal Trip Capture Estimation Tool |                     |  |  |               |                     |
|-------------------------------------------------|---------------------|--|--|---------------|---------------------|
| Project Name:                                   | Tucker Township     |  |  | Organization: | Lowe Engineers, LLC |
| Project Location:                               | Tucker, Georgia     |  |  | Performed By: | RJM                 |
| Scenario Description:                           |                     |  |  | Date:         | 5/25/2016           |
| Analysis Year:                                  |                     |  |  | Checked By:   |                     |
| Analysis Period:                                | PM Street Peak Hour |  |  | Date:         |                     |

| Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate) |                                         |          |       |                                      |          |         |
|------------------------------------------------------------------------------|-----------------------------------------|----------|-------|--------------------------------------|----------|---------|
| Land Use                                                                     | Development Data (For Information Only) |          |       | Estimated Vehicle-Trips <sup>3</sup> |          |         |
|                                                                              | ITE LUCs <sup>1</sup>                   | Quantity | Units | Total                                | Entering | Exiting |
| Office                                                                       | 150,710                                 | Var      |       | 2,296                                | 1,148    | 1,148   |
| Retail                                                                       | 826,850                                 | Var      |       | 8,276                                | 4,138    | 4,138   |
| Restaurant                                                                   |                                         |          |       | 0                                    |          |         |
| Cinema/Entertainment                                                         |                                         |          |       | 0                                    |          |         |
| Residential                                                                  | 220,230,255                             | Var      |       | 5,867                                | 2,934    | 2,933   |
| Hotel                                                                        | 310                                     | Var      |       | 880                                  | 440      | 440     |
| All Other Land Uses <sup>2</sup>                                             |                                         |          |       | 0                                    |          |         |
|                                                                              |                                         |          |       | 17,319                               | 8,660    | 8,659   |

| Table 2-P: Mode Split and Vehicle Occupancy Estimates |                        |           |                 |                        |           |                 |
|-------------------------------------------------------|------------------------|-----------|-----------------|------------------------|-----------|-----------------|
| Land Use                                              | Entering Trips         |           |                 | Exiting Trips          |           |                 |
|                                                       | Veh. Occ. <sup>4</sup> | % Transit | % Non-Motorized | Veh. Occ. <sup>4</sup> | % Transit | % Non-Motorized |
| Office                                                | 1.11                   | 5%        |                 | 1.07                   | 5%        |                 |
| Retail                                                | 1.21                   | 5%        |                 | 1.18                   | 5%        |                 |
| Restaurant                                            |                        | 5%        |                 |                        | 5%        |                 |
| Cinema/Entertainment                                  |                        | 5%        |                 |                        | 5%        |                 |
| Residential                                           | 1.15                   | 5%        |                 | 1.21                   | 5%        |                 |
| Hotel                                                 | 1.31                   | 5%        |                 | 1.30                   | 5%        |                 |
| All Other Land Uses <sup>2</sup>                      |                        | 5%        |                 |                        | 5%        |                 |

| Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance) |                  |        |            |                      |             |       |
|---------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                             | Destination (To) |        |            |                      |             |       |
|                                                                           | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                    |                  |        |            |                      |             |       |
| Retail                                                                    |                  |        |            |                      |             |       |
| Restaurant                                                                |                  |        |            |                      |             |       |
| Cinema/Entertainment                                                      |                  |        |            |                      |             |       |
| Residential                                                               |                  |        |            |                      |             |       |
| Hotel                                                                     |                  |        |            |                      |             |       |

| Table 4-P: Internal Person-Trip Origin-Destination Matrix* |                  |        |            |                      |             |       |
|------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                              | Destination (To) |        |            |                      |             |       |
|                                                            | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                     |                  | 246    | 0          | 0                    | 25          | 0     |
| Retail                                                     | 98               |        | 0          | 0                    | 1270        | 98    |
| Restaurant                                                 | 0                | 0      |            | 0                    | 0           | 0     |
| Cinema/Entertainment                                       | 0                | 0      | 0          |                      | 0           | 0     |
| Residential                                                | 142              | 501    | 0          | 0                    |             | 69    |
| Hotel                                                      | 0                | 92     | 0          | 0                    | 0           |       |

| Table 5-P: Computations Summary           |        |          |         |
|-------------------------------------------|--------|----------|---------|
|                                           | Total  | Entering | Exiting |
| All Person-Trips                          | 20,463 | 10,231   | 10,232  |
| Internal Capture Percentage               | 25%    | 25%      | 25%     |
| External Vehicle-Trips <sup>5</sup>       | 12,351 | 6,172    | 6,179   |
| External Transit-Trips <sup>6</sup>       | 769    | 384      | 385     |
| External Non-Motorized Trips <sup>6</sup> | 0      | 0        | 0       |

| Table 6-P: Internal Trip Capture Percentages by Land Use |                |               |
|----------------------------------------------------------|----------------|---------------|
| Land Use                                                 | Entering Trips | Exiting Trips |
| Office                                                   | 19%            | 22%           |
| Retail                                                   | 17%            | 30%           |
| Restaurant                                               | N/A            | N/A           |
| Cinema/Entertainment                                     | N/A            | N/A           |
| Residential                                              | 38%            | 20%           |
| Hotel                                                    | 29%            | 16%           |

|                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <sup>1</sup> Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.                                  |
| <sup>2</sup> Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.        |
| <sup>3</sup> Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i> ).                                          |
| <sup>4</sup> Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be |
| <sup>5</sup> Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.                                                     |
| <sup>6</sup> Person-Trips                                                                                                                                        |
| *Indicates computation that has been rounded to the nearest whole number.                                                                                        |
| Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1                                                                             |

|                         |                     |
|-------------------------|---------------------|
| <b>Project Name:</b>    | Tucker Township     |
| <b>Analysis Period:</b> | PM Street Peak Hour |

| Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends |                               |               |               |                              |               |               |
|----------------------------------------------------------------|-------------------------------|---------------|---------------|------------------------------|---------------|---------------|
| Land Use                                                       | Table 7-P (D): Entering Trips |               |               | Table 7-P (O): Exiting Trips |               |               |
|                                                                | Veh. Occ.                     | Vehicle-Trips | Person-Trips* | Veh. Occ.                    | Vehicle-Trips | Person-Trips* |
| Office                                                         | 1.11                          | 1148          | 1274          | 1.07                         | 1148          | 1228          |
| Retail                                                         | 1.21                          | 4138          | 5007          | 1.18                         | 4138          | 4883          |
| Restaurant                                                     | 1.00                          | 0             | 0             | 1.00                         | 0             | 0             |
| Cinema/Entertainment                                           | 1.00                          | 0             | 0             | 1.00                         | 0             | 0             |
| Residential                                                    | 1.15                          | 2934          | 3374          | 1.21                         | 2933          | 3549          |
| Hotel                                                          | 1.31                          | 440           | 576           | 1.30                         | 440           | 572           |

| Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin) |                  |        |            |                      |             |       |
|------------------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                                      | Destination (To) |        |            |                      |             |       |
|                                                                                    | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                             |                  | 246    | 49         | 0                    | 25          | 0     |
| Retail                                                                             | 98               |        | 1416       | 195                  | 1270        | 244   |
| Restaurant                                                                         | 0                | 0      |            | 0                    | 0           | 0     |
| Cinema/Entertainment                                                               | 0                | 0      | 0          |                      | 0           | 0     |
| Residential                                                                        | 142              | 1491   | 745        | 0                    |             | 106   |
| Hotel                                                                              | 0                | 92     | 389        | 0                    | 11          |       |

| Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination) |                  |        |            |                      |             |       |
|-----------------------------------------------------------------------------------------|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From)                                                                           | Destination (To) |        |            |                      |             |       |
|                                                                                         | Office           | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office                                                                                  |                  | 401    | 0          | 0                    | 135         | 0     |
| Retail                                                                                  | 395              |        | 0          | 0                    | 1552        | 98    |
| Restaurant                                                                              | 382              | 2504   |            | 0                    | 540         | 409   |
| Cinema/Entertainment                                                                    | 76               | 200    | 0          |                      | 135         | 6     |
| Residential                                                                             | 726              | 501    | 0          | 0                    |             | 69    |
| Hotel                                                                                   | 0                | 100    | 0          | 0                    | 0           |       |

| Table 9-P (D): Internal and External Trips Summary (Entering Trips) |                       |          |       |                         |                      |                            |
|---------------------------------------------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Destination Land Use                                                | Person-Trip Estimates |          |       | External Trips by Mode* |                      |                            |
|                                                                     | Internal              | External | Total | Vehicles <sup>1</sup>   | Transit <sup>2</sup> | Non-Motorized <sup>2</sup> |
| Office                                                              | 240                   | 1034     | 1274  | 885                     | 52                   | 0                          |
| Retail                                                              | 839                   | 4168     | 5007  | 3273                    | 208                  | 0                          |
| Restaurant                                                          | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Cinema/Entertainment                                                | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Residential                                                         | 1295                  | 2079     | 3374  | 1717                    | 104                  | 0                          |
| Hotel                                                               | 167                   | 409      | 576   | 297                     | 20                   | 0                          |
| All Other Land Uses <sup>3</sup>                                    | 0                     | 0        | 0     | 0                       | 0                    | 0                          |

| Table 9-P (O): Internal and External Trips Summary (Exiting Trips) |                       |          |       |                         |                      |                            |
|--------------------------------------------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Origin Land Use                                                    | Person-Trip Estimates |          |       | External Trips by Mode* |                      |                            |
|                                                                    | Internal              | External | Total | Vehicles <sup>1</sup>   | Transit <sup>2</sup> | Non-Motorized <sup>2</sup> |
| Office                                                             | 271                   | 957      | 1228  | 850                     | 48                   | 0                          |
| Retail                                                             | 1466                  | 3417     | 4883  | 2751                    | 171                  | 0                          |
| Restaurant                                                         | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Cinema/Entertainment                                               | 0                     | 0        | 0     | 0                       | 0                    | 0                          |
| Residential                                                        | 712                   | 2837     | 3549  | 2227                    | 142                  | 0                          |
| Hotel                                                              | 92                    | 480      | 572   | 351                     | 24                   | 0                          |
| All Other Land Uses <sup>3</sup>                                   | 0                     | 0        | 0     | 0                       | 0                    | 0                          |

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>2</sup>Person-Trips

<sup>3</sup>Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

\*Indicates computation that has been rounded to the nearest whole number.

**Tucker Township DRI  
Study Segments - GRTA 7% Rule**

| Roadway                        | From                    | To                       | No. of Lanes | Signal | Median | Left Turn Lanes | Speed Limit | Service Volume Analysis Type | LOS | Facility Service Volume | Adjusted Service Facility Service Volume | Dist Res | Dist Non-Res | Res. Trips | Non-Res Trips | Total Daily Project Trips | % Service Volume | Project Trips >7% |
|--------------------------------|-------------------------|--------------------------|--------------|--------|--------|-----------------|-------------|------------------------------|-----|-------------------------|------------------------------------------|----------|--------------|------------|---------------|---------------------------|------------------|-------------------|
| Mountain Industrial Blvd       | South of US 78 EB Ramps | US 78 EB Ramps           | 5            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 43,300                  | 41100                                    | 3%       | 11%          | 176        | 1261          | 1437                      | 3.5%             | No                |
| Mountain Industrial Blvd       | US 78 EB Ramps          | US 78 WB Ramps           | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 28%      | 33%          | 1640       | 3782          | 5422                      | 17.5%            | Yes               |
| Mountain Industrial Blvd       | US 78 WB Ramps          | Hammer Mill Rd           | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 53%      | 56%          | 3104       | 6419          | 9523                      | 30.8%            | Yes               |
| Mountain Industrial Blvd       | Hammer Mill Rd          | Roger Marten Way         | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 53%      | 56%          | 3104       | 6419          | 9523                      | 30.8%            | Yes               |
| Mountain Industrial Blvd       | Roger Marten Way        | Granite Dr               | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 53%      | 56%          | 3104       | 6419          | 9523                      | 30.8%            | Yes               |
| Mountain Industrial Blvd       | Granite Dr              | Hugh Howell Rd           | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 53%      | 56%          | 3104       | 6419          | 9523                      | 30.8%            | Yes               |
| Mountain Industrial Blvd       | Hugh Howell Rd          | Tuckestone Pkwy          | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 35,000                  | 33300                                    | 16%      | 23%          | 937        | 2636          | 3573                      | 10.7%            | Yes               |
| Mountain Industrial Blvd       | Tuckestone Pkwy         | N Royal Atlanta Dr       | 4            | Yes    | Yes    | Yes             | 45          | State Two Way Arterial       | D   | 35,000                  | 33300                                    | 16%      | 23%          | 937        | 2636          | 3573                      | 10.7%            | Yes               |
| Mountain Industrial Blvd       | N Royal Atlanta Dr      | US 29/SR 8               | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 35,000                  | 33300                                    | 16%      | 23%          | 937        | 2636          | 3573                      | 10.7%            | Yes               |
| Hugh Howell Rd (SR 236)        | US 29/SR 8              | Cowan Rd                 | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 25%      | 13%          | 1464       | 1490          | 2954                      | 9.6%             | Yes               |
| Hugh Howell Rd (SR 236)        | Cowan Rd                | Tucker Industrial Rd     | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 25%      | 13%          | 1464       | 1490          | 2954                      | 9.6%             | Yes               |
| Hugh Howell Rd (SR 236)        | Tucker Industrial Rd    | Mountain Industrial Blvd | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 25%      | 13%          | 1464       | 1490          | 2954                      | 9.6%             | Yes               |
| Hugh Howell Rd (SR 236)        | Mountain Industrial     | Flintstone Dr            | 4            | No     | No     | No              | 45          | State Two Way Arterial       | D   | 35,000                  | 26300                                    | 80%      | 70%          | 4686       | 8023          | 12709                     | 48.3%            | Yes               |
| Hugh Howell Rd (SR 236)        | Flintstone Dr           | Mountain Creek Dr        | 4            | No     | No     | No              | 45          | State Two Way Arterial       | D   | 35,000                  | 26300                                    | 6%       | 8%           | 351        | 917           | 1268                      | 4.8%             | No                |
| Hugh Howell Rd (SR 236)        | Mountain Creek Dr       | McCurdy Rd               | 2            | No     | No     | No              | 45          | State Two Way Arterial       | D   | 16,600                  | 13300                                    | 6%       | 8%           | 351        | 917           | 1268                      | 9.5%             | Yes               |
| Hugh Howell Rd (SR 236)        | McCurdy Rd              | Rosser Rd                | 2            | No     | No     | No              | 45          | State Two Way Arterial       | D   | 16,000                  | 12800                                    | 6%       | 8%           | 351        | 917           | 1268                      | 9.9%             | Yes               |
| Hugh Howell Rd (SR 236)        | Rosser Rd               | Silver Hill Rd           | 2            | No     | No     | No              | 45          | State Two Way Arterial       | D   | 16,600                  | 13300                                    | 5%       | 7%           | 293        | 802           | 1095                      | 8.2%             | Yes               |
| Hugh Howell Rd (SR 236)        | Silver Hill Rd          | Stone Creek Dr           | 2            | No     | No     | No              | 45          | State Two Way Arterial       | D   | 16,600                  | 13300                                    | 4%       | 6%           | 234        | 688           | 922                       | 6.9%             | No                |
| Hugh Howell Rd (SR 236)        | Stone Creek Dr          | US 78                    | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 4%       | 5%           | 234        | 573           | 807                       | 2.6%             | No                |
| Lawrenceville Hwy (US 29/SR 8) | Montreal Rd             | Northlake Pkwy           | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 35,000                  | 33300                                    | 20%      | 10%          | 1171       | 1146          | 2317                      | 7.0%             | No                |
| Lawrenceville Hwy (US 29/SR 8) | Northlake Pkwy          | Brockett Rd              | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 35,000                  | 33300                                    | 20%      | 10%          | 1171       | 1146          | 2317                      | 7.0%             | No                |
| Lawrenceville Hwy (US 29/SR 8) | Brockett Rd             | Fellowship Rd            | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 20%      | 10%          | 1171       | 1146          | 2317                      | 7.5%             | Yes               |
| Lawrenceville Hwy (US 29/SR 8) | Fellowship Rd           | Main St                  | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 20%      | 10%          | 1171       | 1146          | 2317                      | 7.5%             | Yes               |
| Lawrenceville Hwy (US 29/SR 8) | Main St                 | Hugh Howell Rd           | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 20%      | 10%          | 1171       | 1146          | 2317                      | 7.5%             | Yes               |
| Lawrenceville Hwy (US 29/SR 8) | Hugh Howell Rd          | Lavista Rd               | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 5%       | 3%           | 293        | 344           | 637                       | 2.1%             | No                |
| Lawrenceville Hwy (US 29/SR 8) | Lavista Rd              | Mountain Industrial Blvd | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 2%       | 2%           | 117        | 229           | 346                       | 1.1%             | No                |
| Lavista Rd (SR 236)            | Lawrenceville Hwy       | Chamblee Tucker Rd       | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 5%       | 3%           | 293        | 344           | 637                       | 2.1%             | No                |
| Lavista Rd (SR 236)            | Chamblee Tucker Rd      | Brocket Rd/Henderson Rd  | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 32,500                  | 30900                                    | 5%       | 3%           | 293        | 344           | 637                       | 2.1%             | No                |
| Lavista Rd (SR 236)            | Henderson Rd            | Northlake Pkwy           | 4            | Yes    | No     | Yes             | 45          | State Two Way Arterial       | D   | 35,000                  | 33300                                    | 5%       | 3%           | 293        | 344           | 637                       | 1.9%             | No                |
| Stone Mountain Freeway (US 78) | Brocket Rd              | Mountain Industrial Blvd | 6            | No     | Yes    | No              | 65          | Freeway                      | D   | 101,600                 | 101,600                                  | 48%      | 40%          | 2811       | 4585          | 7396                      | 7.3%             | Yes               |
| Stone Mountain Freeway (US 78) | Mountain Industrial     | Memorial Drive           | 6            | No     | Yes    | No              | 65          | Freeway                      | D   | 101,600                 | 101,600                                  | 2%       | 5%           | 117        | 573           | 690                       | 0.7%             | No                |

## Short Title

US 29 (SCOTT BOULEVARD / LAWRENCEVILLE HIGHWAY) AND SR 236 (HUGH HOWELL ROAD) SIGNAL UPGRADES AT 9 LOCATIONS

## GDOT Project No.

0012814

## Federal ID No.

N/A

## Status

Programmed

## Service Type

Roadway / Operations &amp; Safety

## Sponsor

GDOT

## Jurisdiction

Multi-County

## Analysis Level

Exempt from Air Quality Analysis (40 CFR 93)

## Existing Thru Lane

N/A

## Planned Thru Lane

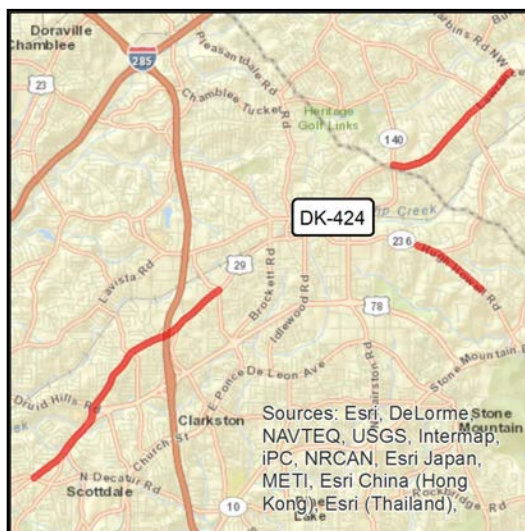
N/A

## Network Year

TBD

## Corridor Length

N/A miles



## Detailed Description and Justification

Signal upgrades on SR 8 (Scott Boulevard/Lawrenceville Highway) and SR 236 (Hugh Howell Road) in Gwinnett and DeKalb counties. Total corridor length on SR 8 is approximately 6.8 miles, with 7 signal upgrades: N Decatur Road, DeKalb Industrial Way, Colledge Road, Jimmy Carter Boulevard, Harmony Grove Road, Greenwood Drive, and Harbins Road. Total corridor length on SR 236 is approximately 1.3 miles, with 2 signal upgrades: McCurdy Road and Silver Hill Road.

| Phase Status & Funding Information |                                 | Status | FISCAL YEAR | TOTAL PHASE COST   | BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE |                    |                    |                    |
|------------------------------------|---------------------------------|--------|-------------|--------------------|-------------------------------------------------|--------------------|--------------------|--------------------|
|                                    |                                 |        |             |                    | FEDERAL                                         | STATE              | BONDS              | LOCAL/PRIVATE      |
| PE                                 | STP - Statewide Flexible (GDOT) | AUTH   | 2014        | <b>\$343,789</b>   | <del>\$343,789</del>                            | <del>\$0,000</del> | <del>\$0,000</del> | <del>\$0,000</del> |
| ROW                                | STP - Statewide Flexible (GDOT) |        | 2017        | <b>\$468,180</b>   | \$468,180                                       | \$0,000            | \$0,000            | \$0,000            |
| CST                                | STP - Statewide Flexible (GDOT) |        | 2018        | <b>\$1,519,349</b> | \$1,519,349                                     | \$0,000            | \$0,000            | \$0,000            |
|                                    |                                 |        |             | <b>\$2,331,318</b> | <b>\$2,331,318</b>                              | <b>\$0,000</b>     | <b>\$0,000</b>     | <b>\$0,000</b>     |

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition  
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email [transportation@atlantaregional.com](mailto:transportation@atlantaregional.com).



## Short Title

TUCKER PEDESTRIAN FACILITIES - PHASE II

## GDOT Project No.

0012617

## Federal ID No.

N/A

## Status

Programmed

## Service Type

Last Mile Connectivity / Pedestrian Facility

## Sponsor

DeKalb County

## Jurisdiction

DeKalb County

## Analysis Level

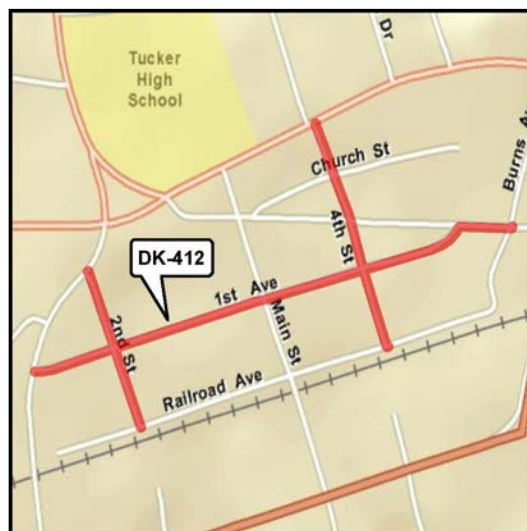
Exempt from Air Quality Analysis (40 CFR 93)

## Existing Thru Lane

N/A

## Planned Thru Lane

N/A



## Network Year

TBD

## Corridor Length

0.9 miles

## Detailed Description and Justification

Sidewalks, ADA upgrades, crosswalks, on-street parking, sharrows, landscaping and lighting. The project will provide improvements along the following: 1st Avenue from Lynburn Drive to Fellowship Road; 2nd Street from RR Avenue to Fellowship Road; 4th Street from RR Avenue to Lavista Road; and Lynburn Drive from 1st Avenue to Burns Drive.

| Phase Status & Funding Information |                           | Status | FISCAL YEAR | TOTAL PHASE COST   | BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE |                    |                    |                     |
|------------------------------------|---------------------------|--------|-------------|--------------------|-------------------------------------------------|--------------------|--------------------|---------------------|
|                                    |                           |        |             |                    | FEDERAL                                         | STATE              | BONDS              | LOCAL/PRIVATE       |
| PE                                 | STP - Urban (>200K) (ARC) | AUTH   | 2013        | <b>\$62,500</b>    | <del>\$50,000</del>                             | <del>\$0,000</del> | <del>\$0,000</del> | <del>\$12,500</del> |
| PE                                 | STP - Urban (>200K) (ARC) | AUTH   | 2014        | <b>\$87,500</b>    | <del>\$70,000</del>                             | <del>\$0,000</del> | <del>\$0,000</del> | <del>\$17,500</del> |
| ROW                                | STP - Urban (>200K) (ARC) |        | 2016        | <b>\$740,693</b>   | \$200,000                                       | \$0,000            | \$0,000            | \$540,693           |
| UTL                                | STP - Urban (>200K) (ARC) |        | 2018        | <b>\$0,000</b>     | \$0,000                                         | \$0,000            | \$0,000            | \$0,000             |
| CST                                | STP - Urban (>200K) (ARC) |        | 2018        | <b>\$1,899,294</b> | \$640,000                                       | \$0,000            | \$0,000            | \$1,259,294         |
|                                    |                           |        |             | <b>\$2,789,987</b> | <b>\$960,000</b>                                | <b>\$0,000</b>     | <b>\$0,000</b>     | <b>\$1,829,987</b>  |

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition  
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email [transportation@atlantaregional.com](mailto:transportation@atlantaregional.com).



## Tucker Last Mile Connectivity

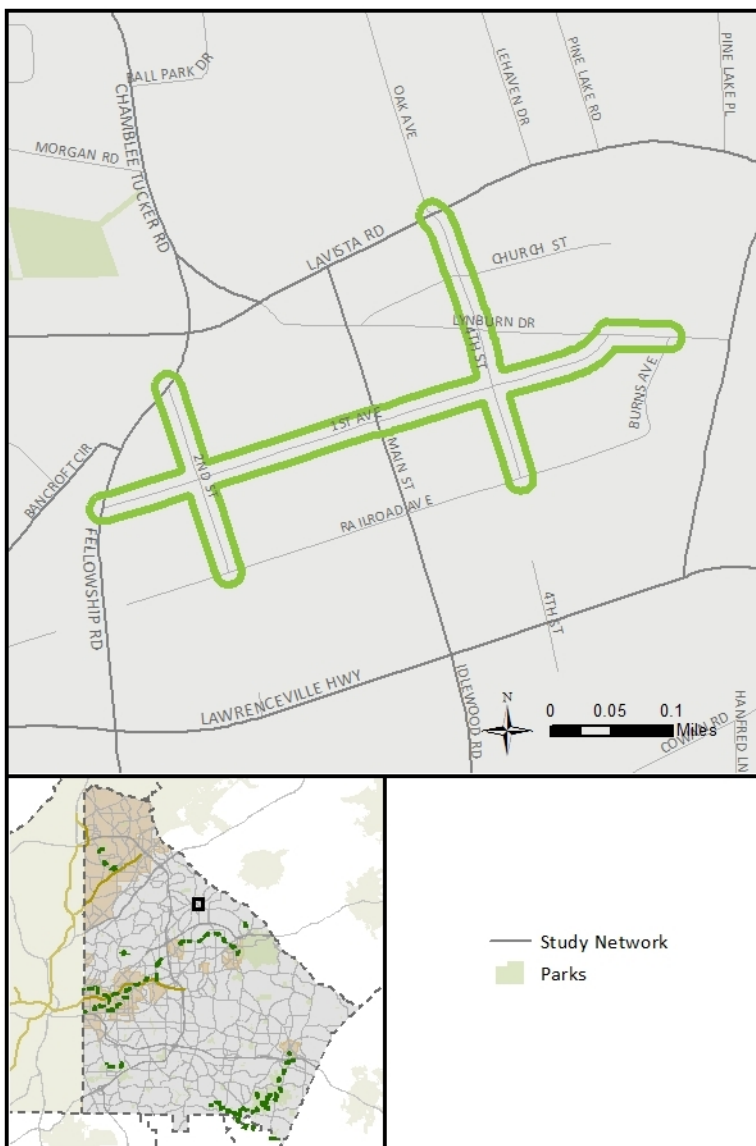
Project 6021  
Tier 1

## Project Description

Last mile connectivity pedestrian facilities in and around Tucker.

## Project Details

|              |                                                           |
|--------------|-----------------------------------------------------------|
| PROJECT ID   | 6021                                                      |
| LOCATION     | 1st Ave/ 2nd St/ Main St/ 4th St                          |
| EXTENTS      | From Fellowship Rd/ Railroad Ave to Burns Ave/ LaVista Rd |
| LENGTH       | 0.88 miles                                                |
| PLAN 2040 ID | DK-412                                                    |



## Project Cost Estimate

|                                 |                    |
|---------------------------------|--------------------|
| ENGINEERING COST                | \$150,000          |
| RIGHT-OF-WAY COST               | \$250,000          |
| CONSTRUCTION COST               | \$800,000          |
| <b>TOTAL CAPITAL COST</b>       | <b>\$1,200,000</b> |
| OPERATIONS AND MAINTENANCE COST | \$80,000           |

## Project Implementation

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | DeKalb County               |
| PROJECT LOCATION (Pct) | unincorporated DeKalb (100) |

### Funding Considerations

|                                                   |   |                           |   |
|---------------------------------------------------|---|---------------------------|---|
| On State Route                                    |   | Activity Center           |   |
| Priority Bike Network                             |   | Economic Development Area |   |
| 1/2-mile from Premium Transit (existing / future) |   | LCI Area                  | X |
| 1/4-Mile from Local Bus (existing / future)       | X | Equitable Target Area     |   |
| 1/4-Mile from School, Park, or Community Center   |   |                           |   |

## Short Title

DEKALB SIDEWALK PROGRAM: PHASE 2C - FLAT SHOALS, HENDERSON, AND SALEM ROADS

## GDOT Project No.

0008268

## Federal ID No.

CSSTP-0008-00(268)

## Status

Programmed

## Service Type

Last Mile Connectivity / Pedestrian Facility

## Sponsor

DeKalb County

## Jurisdiction

DeKalb County

## Analysis Level

Exempt from Air Quality Analysis (40 CFR 93)

## Existing Thru Lane

N/A

## Planned Thru Lane

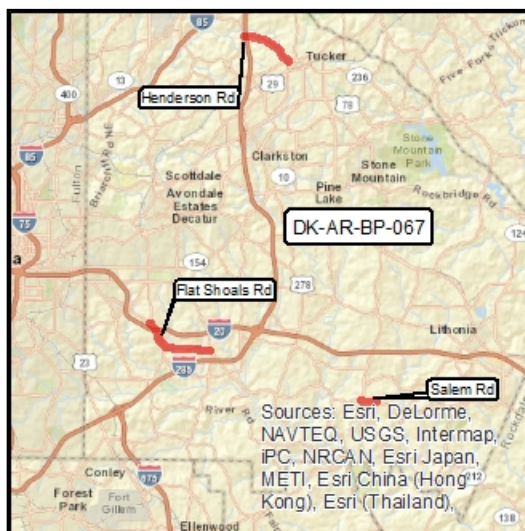
N/A

## Network Year

TBD

## Corridor Length

5.3 miles



## Detailed Description and Justification

This project will provide bicycle and pedestrian upgrades to public schools in the DeKalb County area. Provides continuous 5' wide ADA accessible sidewalks, with a 2' wide grass buffer, along at least one side of the street to a variety of corridors including Flat Shoals Road from Second Avenue to Candler Road (2.7 miles), Henderson Road from LaVista Road to Henderson Mill Road (2.0 miles), and Salem Road from Old Panola Road to Fannin Drive (0.6 mile).

| Phase Status & Funding Information |                                       | Status | FISCAL YEAR | TOTAL PHASE COST | BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE |         |         |               |
|------------------------------------|---------------------------------------|--------|-------------|------------------|-------------------------------------------------|---------|---------|---------------|
|                                    |                                       |        |             |                  | FEDERAL                                         | STATE   | BONDS   | LOCAL/PRIVATE |
| PE                                 | Local Jurisdiction/Municipality Funds | AUTH   | 2006        | \$75,000         | \$0,000                                         | \$0,000 | \$0,000 | \$75,000      |
| ROW                                | Federal Earmark Funding               | AUTH   | 2015        | \$3,110,000      | \$600,000                                       | \$0,000 | \$0,000 | \$2,510,000   |
| CST                                | Local Jurisdiction/Municipality Funds |        | 2018        | \$3,218,758      | \$0,000                                         | \$0,000 | \$0,000 | \$3,218,758   |
|                                    |                                       |        |             | \$6,403,758      | \$600,000                                       | \$0,000 | \$0,000 | \$5,803,758   |

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition  
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email [transportation@atlantaregional.com](mailto:transportation@atlantaregional.com).





**Chamblee Tucker Road / LaVista Road / Fellowship Road Intersection Redesign**

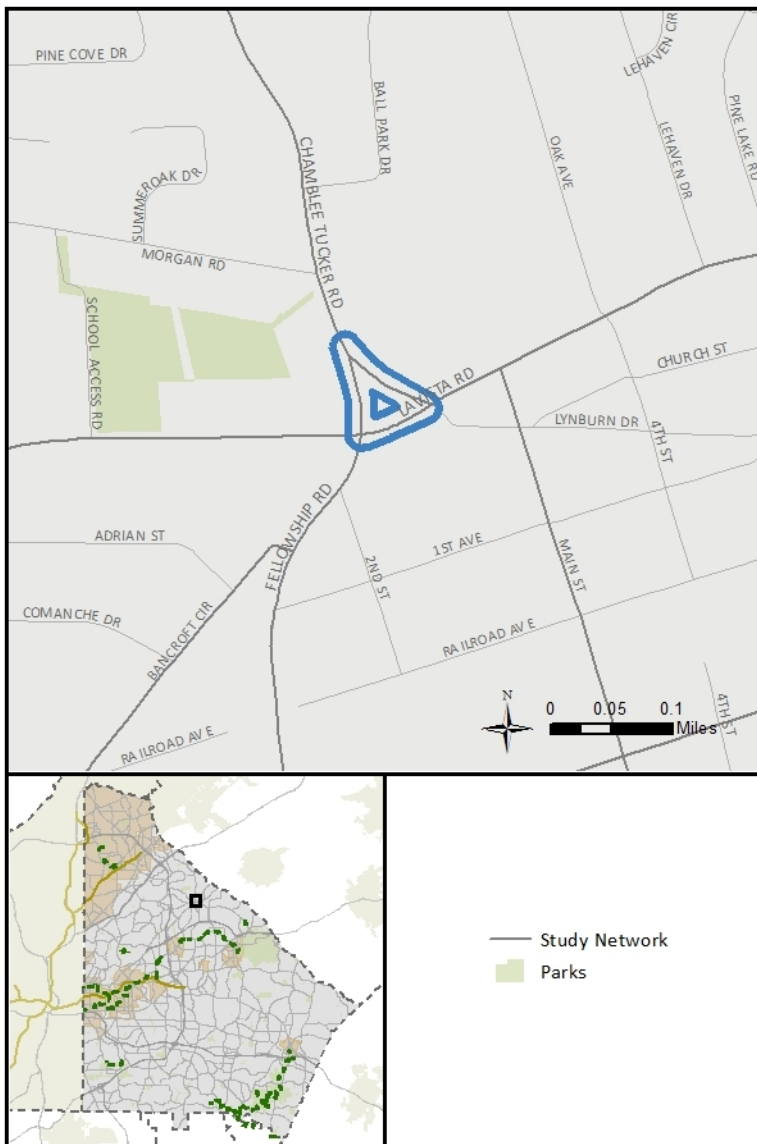
**Project 1391  
Tier 2B**

**Project Description**

Chamblee Tucker/ LaVista/ Fellowship intersection redesign.

**Project Details**

|              |                                                                  |
|--------------|------------------------------------------------------------------|
| PROJECT ID   | 1391                                                             |
| LOCATION     | Chamblee Tucker Rd/ LaVista Rd/ Fellowship intersection redesign |
| EXTENTS      | N/A                                                              |
| LENGTH       | 0.2 miles                                                        |
| PLAN 2040 ID | N/A                                                              |



**Project Cost Estimate**

|                                 |                    |
|---------------------------------|--------------------|
| ENGINEERING COST                | \$160,000          |
| RIGHT-OF-WAY COST               | \$ -               |
| CONSTRUCTION COST               | \$1,067,000        |
| <b>TOTAL CAPITAL COST</b>       | <b>\$1,228,000</b> |
| OPERATIONS AND MAINTENANCE COST | \$107,000          |

**Project Implementation**

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | DeKalb County               |
| PERCENT LOCATION (Pct) | unincorporated DeKalb (100) |

**Funding Considerations**

|                                         |   |                           |   |
|-----------------------------------------|---|---------------------------|---|
| On the National Highway System          |   | Activity Center           |   |
| ASTRoMaP/ Regional Thoroughfare Network |   | Economic Development Area |   |
| State Route                             | X | LCI Area                  | X |
| Multimodal Project                      | X | Equitable Target Area     |   |



**Hugh Howell Road at Lawrenceville Highway  
Intersection Improvements**

**Project 1736  
Tier 1-GDOT**

**Project Description**

Intersection improvements.

**Project Details**

|              |                                    |
|--------------|------------------------------------|
| PROJECT ID   | 1736                               |
| LOCATION     | Hugh Howell Rd @ Lawrenceville Hwy |
| EXTENTS      | N/A                                |
| LENGTH       | N/A                                |
| PLAN 2040 ID | N/A                                |

**Project Cost Estimate**

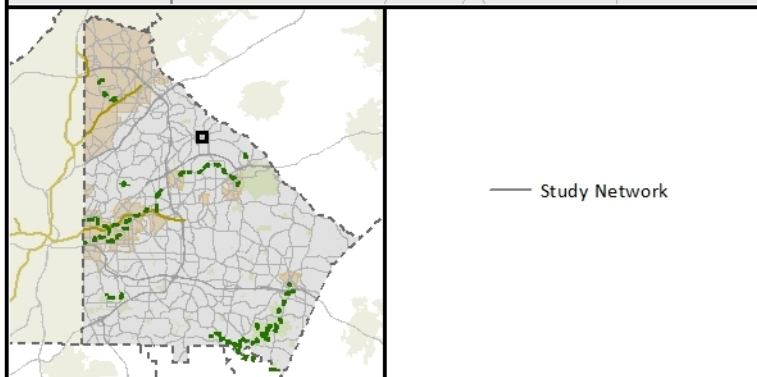
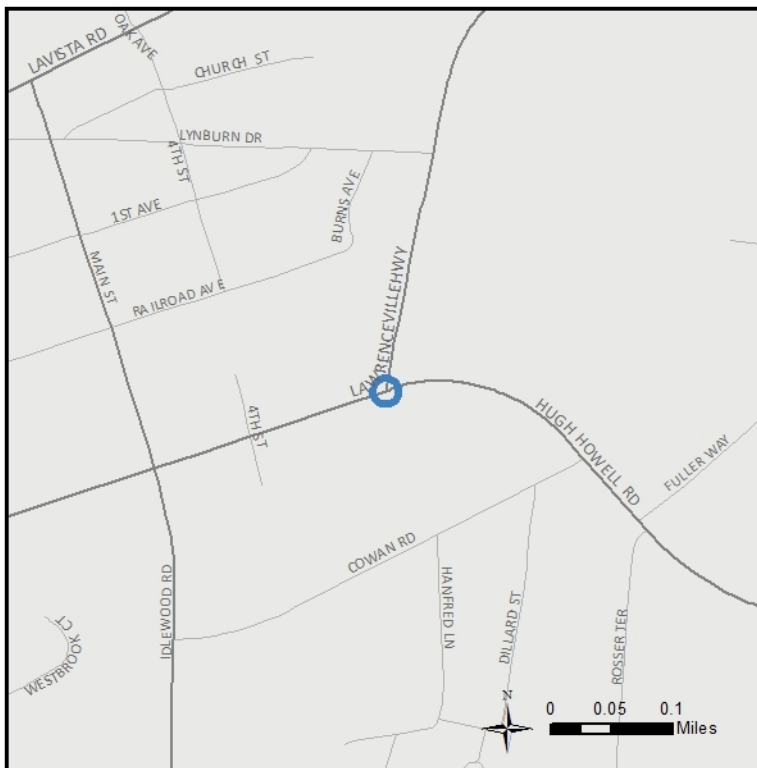
|                                 |                    |
|---------------------------------|--------------------|
| ENGINEERING COST                | \$400,000          |
| RIGHT-OF-WAY COST               | \$ -               |
| CONSTRUCTION COST               | \$4,000,000        |
| <b>TOTAL CAPITAL COST</b>       | <b>\$4,400,000</b> |
| OPERATIONS AND MAINTENANCE COST | \$400,000          |

**Project Implementation**

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | GDOT - DeKalb County        |
| PERCENT LOCATION (Pct) | unincorporated DeKalb (100) |

**Funding Considerations**

|                                         |   |                           |   |
|-----------------------------------------|---|---------------------------|---|
| On the National Highway System          |   | Activity Center           |   |
| ASTRoMaP/ Regional Thoroughfare Network |   | Economic Development Area |   |
| State Route                             | X | LCI Area                  | X |
| Multimodal Project                      | X | Equitable Target Area     |   |





**Chamblee Tucker Road, Road Diet - Phase I**

**Project 2063**  
**Tier 1**

**Project Description**

Road diet to include two through lanes and a center left-turn lane and bike lanes. Operational and pedestrian improvements will also be made at key locations along the corridor.

**Project Details**

|              |                                       |
|--------------|---------------------------------------|
| PROJECT ID   | 2063                                  |
| LOCATION     | Chamblee Tucker Rd                    |
| EXTENTS      | From Tucker Norcross Rd to LaVista Rd |
| LENGTH       | 1.88 miles                            |
| PLAN 2040 ID | N/A                                   |

**Project Cost Estimate**

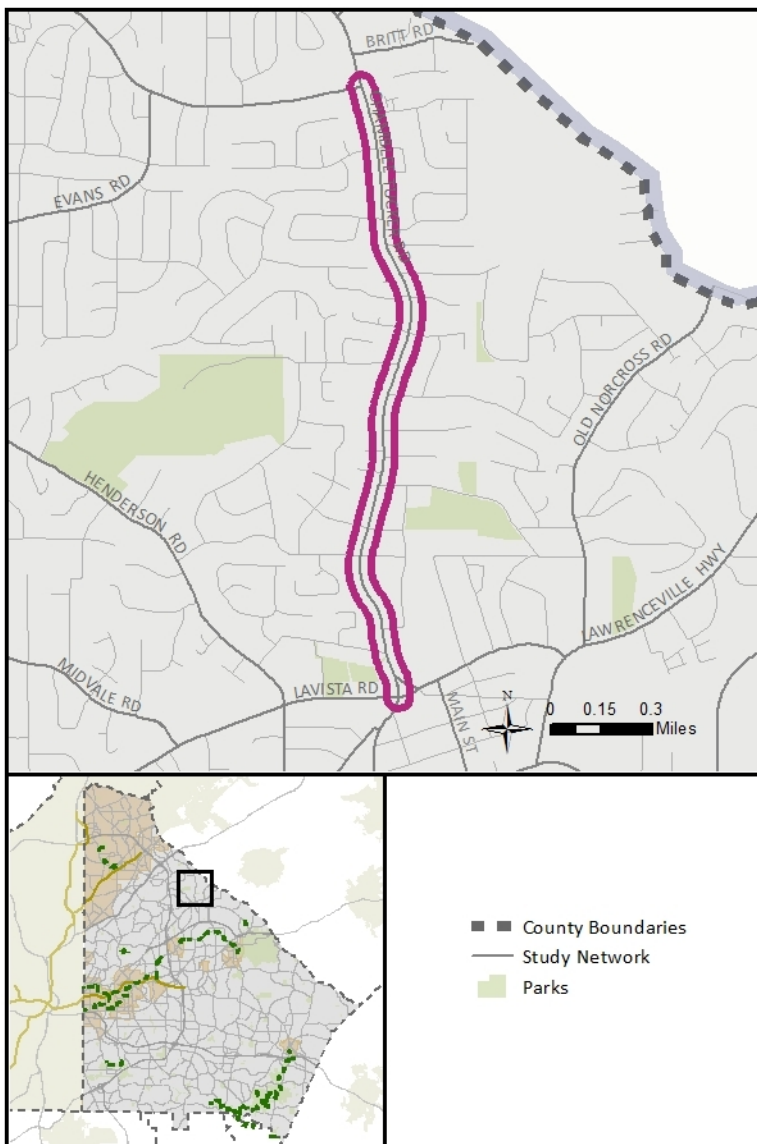
|                                 |                    |
|---------------------------------|--------------------|
| ENGINEERING COST                | \$220,000          |
| RIGHT-OF-WAY COST               | \$ -               |
| CONSTRUCTION COST               | \$2,760,000        |
| <b>TOTAL CAPITAL COST</b>       | <b>\$2,980,000</b> |
| OPERATIONS AND MAINTENANCE COST | \$ -               |

**Project Implementation**

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | DeKalb County               |
| PERCENT LOCATION (Pct) | unincorporated DeKalb (100) |

**Funding Considerations**

|                                         |                           |   |
|-----------------------------------------|---------------------------|---|
| On the National Highway System          | Activity Center           | X |
| ASTRoMaP/ Regional Thoroughfare Network | Economic Development Area |   |
| State Route                             | LCI Area                  | X |
|                                         | Equitable Target Area     | X |





## Mountain Industrial Boulevard Pedestrian Improvements

**Project 2912**  
**Tier 2B**

### Project Description

Install sidewalks and improve pedestrian crossings along this corridor. Project assumes approximately 1.8 miles of minimal grading.

### Project Details

|              |                                             |
|--------------|---------------------------------------------|
| PROJECT ID   | 2912                                        |
| LOCATION     | Mountain Industrial Blvd                    |
| EXTENTS      | From Gwinnett County Line to Hugh Howell Rd |
| LENGTH       | 1.77 miles                                  |
| PLAN 2040 ID | N/A                                         |

### Project Cost Estimate

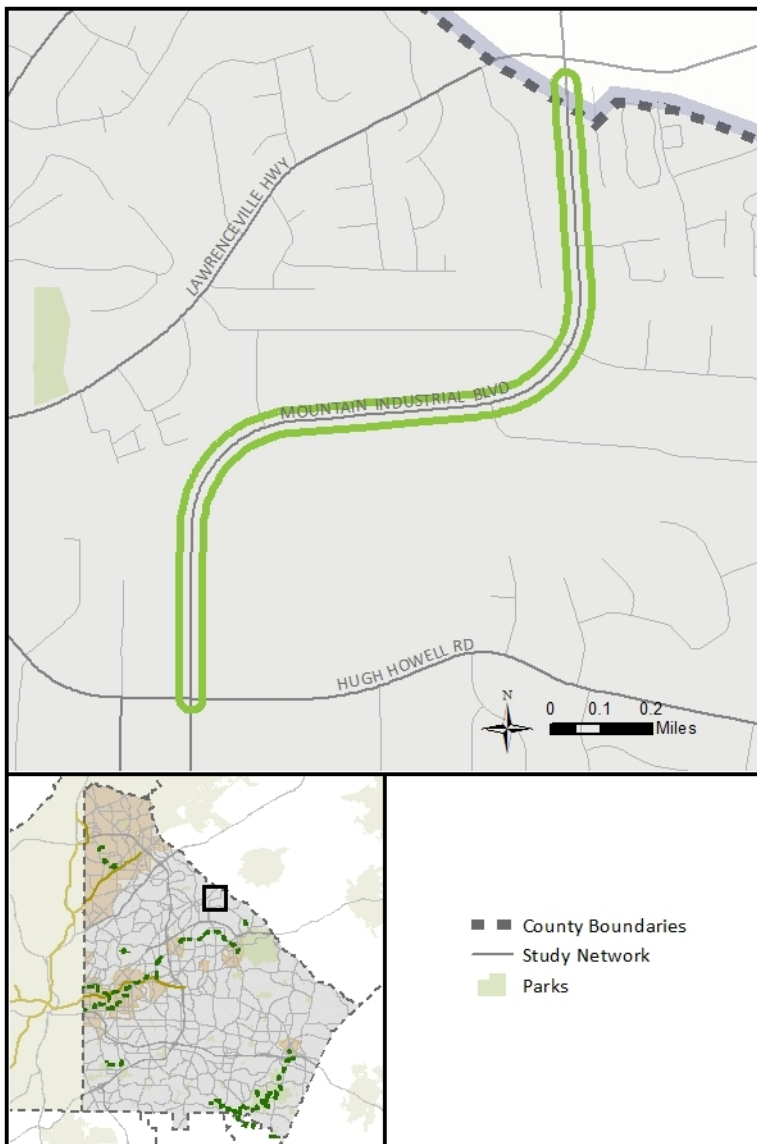
|                                 |                    |
|---------------------------------|--------------------|
| ENGINEERING COST                | \$40,000           |
| RIGHT-OF-WAY COST               | \$1,676,714        |
| CONSTRUCTION COST               | \$360,000          |
| <b>TOTAL CAPITAL COST</b>       | <b>\$2,076,714</b> |
| OPERATIONS AND MAINTENANCE COST | \$70,000           |

### Project Implementation

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | DeKalb County               |
| PROJECT LOCATION (Pct) | unincorporated DeKalb (100) |

### Funding Considerations

|                                                   |   |                           |   |
|---------------------------------------------------|---|---------------------------|---|
| On State Route                                    |   | Activity Center           |   |
| Priority Bike Network                             | X | Economic Development Area | X |
| 1/2-mile from Premium Transit (existing / future) |   | LCI Area                  |   |
| 1/4-Mile from Local Bus (existing / future)       | X | Equitable Target Area     |   |
| 1/4-Mile from School, Park, or Community Center   |   |                           |   |





**Lawrenceville Highway Pedestrian Improvements**

**Project 2950**  
**Tier 2B**

**Project Description**

Install sidewalks and improve pedestrian crossings along this corridor.

**Project Details**

|              |                                              |
|--------------|----------------------------------------------|
| PROJECT ID   | 2950                                         |
| LOCATION     | Lawrenceville Hwy                            |
| EXTENTS      | From Lee Way (250 east of) to Hugh Howell Rd |
| LENGTH       | 2.8 miles                                    |
| PLAN 2040 ID | N/A                                          |

**Project Cost Estimate**

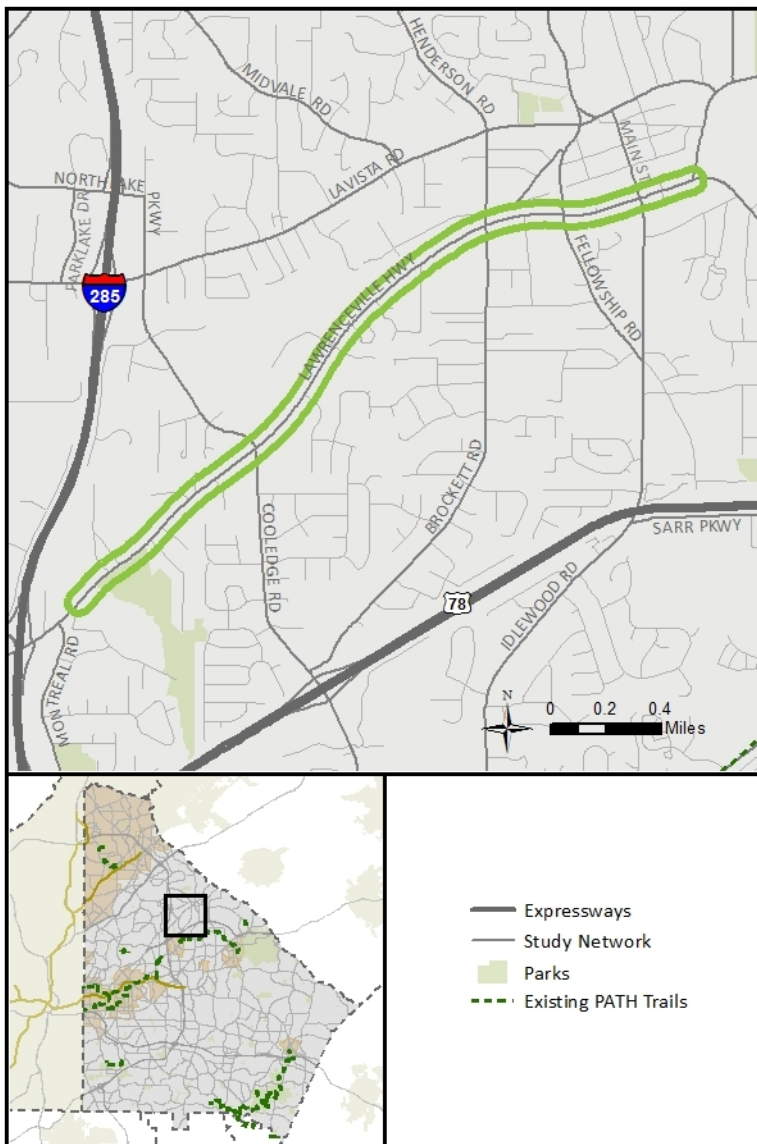
|                                 |                    |
|---------------------------------|--------------------|
| ENGINEERING COST                | \$60,000           |
| RIGHT-OF-WAY COST               | \$2,660,000        |
| CONSTRUCTION COST               | \$560,000          |
| <b>TOTAL CAPITAL COST</b>       | <b>\$3,280,000</b> |
| OPERATIONS AND MAINTENANCE COST | \$110,000          |

**Project Implementation**

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | GDOT - DeKalb County        |
| PROJECT LOCATION (Pct) | unincorporated DeKalb (100) |

**Funding Considerations**

|                                                   |   |                           |   |
|---------------------------------------------------|---|---------------------------|---|
| On State Route                                    | X | Activity Center           |   |
| Priority Bike Network                             | X | Economic Development Area |   |
| 1/2-mile from Premium Transit (existing / future) |   | LCI Area                  | X |
| 1/4-Mile from Local Bus (existing / future)       | X | Equitable Target Area     |   |
| 1/4-Mile from School, Park, or Community Center   |   |                           |   |





**Mountain Industrial Boulevard at Stone Mountain Parkway Intersection Lighting Improvements**

**Project 6028**  
**Tier 2C**

**Project Description**

Add lighting to ramps and approaches at this interchange.

**Project Details**

|              |                                                |
|--------------|------------------------------------------------|
| PROJECT ID   | 6028                                           |
| LOCATION     | Mountain Industrial Blvd @ Stone Mountain Pkwy |
| EXTENTS      | N/A                                            |
| LENGTH       | 0.09 miles                                     |
| PLAN 2040 ID | N/A                                            |

**Project Cost Estimate**

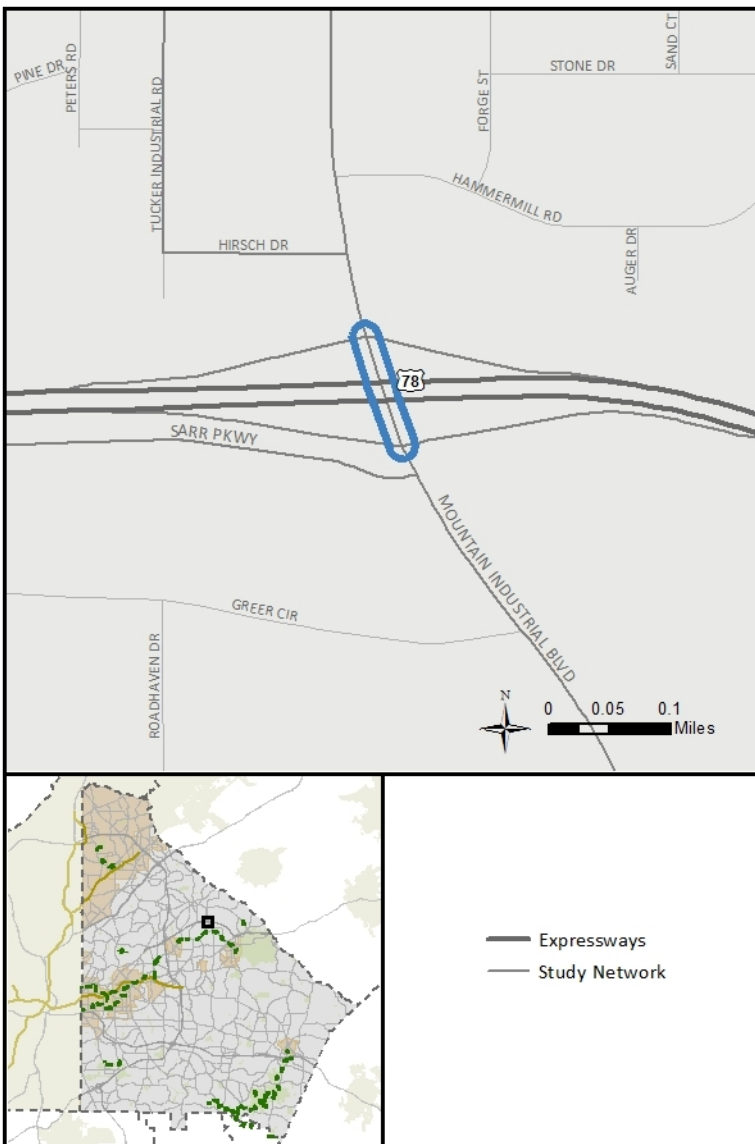
|                                 |                  |
|---------------------------------|------------------|
| ENGINEERING COST                | \$25,000         |
| RIGHT-OF-WAY COST               | \$ -             |
| CONSTRUCTION COST               | \$250,000        |
| <b>TOTAL CAPITAL COST</b>       | <b>\$275,000</b> |
| OPERATIONS AND MAINTENANCE COST | \$25,000         |

**Project Implementation**

|                        |                             |
|------------------------|-----------------------------|
| LOCAL LEAD             | DeKalb / Stone Mountain CID |
| PERCENT LOCATION (Pct) | unincorporated DeKalb (100) |

**Funding Considerations**

|                                         |   |                           |   |
|-----------------------------------------|---|---------------------------|---|
| On the National Highway System          |   | Activity Center           |   |
| ASTRoMaP/ Regional Thoroughfare Network |   | Economic Development Area | X |
| State Route                             | X | LCI Area                  |   |
| Multimodal Project                      | X | Equitable Target Area     |   |



# HCM 2010 Signalized Intersection Summary

## 1: Mtn Indus Blvd & US 78 WB Off Ramp/US 78 WB On Ramp

6/21/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |  |  |  |  |
| Volume (veh/h)                                                       | 454                                                                               | 0                                                                                 | 420                                                                               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1409                                                                                | 64                                                                                  | 113                                                                                 | 733                                                                                 | 0                                                                                   |
| Number                                                               | 7                                                                                 | 4                                                                                 | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1776                                                                              | 1776                                                                              | 1776                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1810                                                                                | 1810                                                                                | 1776                                                                                | 1776                                                                                | 0                                                                                   |
| Adj Flow Rate, veh/h                                                 | 493                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1532                                                                                | 0                                                                                   | 123                                                                                 | 797                                                                                 | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 3                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor                                                     | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                                 | 7                                                                                 | 7                                                                                 | 7                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5                                                                                   | 5                                                                                   | 7                                                                                   | 7                                                                                   | 0                                                                                   |
| Cap, veh/h                                                           | 660                                                                               | 0                                                                                 | 295                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2593                                                                                | 807                                                                                 | 335                                                                                 | 2224                                                                                | 0                                                                                   |
| Arrive On Green                                                      | 0.20                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.52                                                                                | 0.00                                                                                | 0.06                                                                                | 0.66                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3382                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5103                                                                                | 1538                                                                                | 1691                                                                                | 3463                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h                                                 | 493                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1532                                                                                | 0                                                                                   | 123                                                                                 | 797                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1691                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1647                                                                                | 1538                                                                                | 1691                                                                                | 1687                                                                                | 0                                                                                   |
| Q Serve(g_s), s                                                      | 7.6                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 11.7                                                                                | 0.0                                                                                 | 1.6                                                                                 | 5.8                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 7.6                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 11.7                                                                                | 0.0                                                                                 | 1.6                                                                                 | 5.8                                                                                 | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 660                                                                               | 0                                                                                 | 295                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2593                                                                                | 807                                                                                 | 335                                                                                 | 2224                                                                                | 0                                                                                   |
| V/C Ratio(X)                                                         | 0.75                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.59                                                                                | 0.00                                                                                | 0.37                                                                                | 0.36                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 1045                                                                              | 0                                                                                 | 467                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2593                                                                                | 807                                                                                 | 354                                                                                 | 2224                                                                                | 0                                                                                   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 1.00                                                                                | 0.00                                                                                | 0.50                                                                                | 0.50                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 20.8                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 9.0                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 4.2                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 1.7                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 1.0                                                                                 | 0.0                                                                                 | 0.3                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 3.6                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 5.5                                                                                 | 0.0                                                                                 | 0.8                                                                                 | 2.7                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 22.6                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 10.0                                                                                | 0.0                                                                                 | 7.3                                                                                 | 4.4                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | A                                                                                   |                                                                                     | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 493                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1532                                                                                |                                                                                     |                                                                                     | 920                                                                                 |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 22.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     | 4.8                                                                                 |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             | 7.4                                                                               | 32.9                                                                              |                                                                                   | 14.7                                                                              |                                                                                   | 40.3                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          | 4.0                                                                               | 22.0                                                                              |                                                                                   | 17.0                                                                              |                                                                                   | 30.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         | 3.6                                                                               | 13.7                                                                              |                                                                                   | 9.6                                                                               |                                                                                   | 7.8                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              | 0.0                                                                               | 7.0                                                                               |                                                                                   | 1.2                                                                               |                                                                                   | 16.1                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 10.5                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/21/2016

|                              |  |      |     |                                                                                   |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
|------------------------------|------------------------------------------------------------------------------------|------|-----|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                                | EBT  | EBR | WBL                                                                               | WBT  | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR  | SBL  | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                    |      |     |  |      |  |  |  |      |      |  |  |
| Volume (veh/h)               | 0                                                                                  | 0    | 0   | 103                                                                               | 0    | 520                                                                               | 341                                                                                 | 1663                                                                                | 0    | 0    | 710                                                                                 | 671                                                                                 |
| Number                       |                                                                                    |      |     | 3                                                                                 | 8    | 18                                                                                | 5                                                                                   | 2                                                                                   | 12   | 1    | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          |                                                                                    |      |     | 0                                                                                 | 0    | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0    | 0    | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          |                                                                                    |      |     | 1.00                                                                              |      | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00 | 1.00 |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             |                                                                                    |      |     | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       |                                                                                    |      |     | 1937                                                                              | 0    | 1863                                                                              | 1792                                                                                | 1792                                                                                | 0    | 0    | 1776                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         |                                                                                    |      |     | 112                                                                               | 0    | 565                                                                               | 371                                                                                 | 1808                                                                                | 0    | 0    | 772                                                                                 | 0                                                                                   |
| Adj No. of Lanes             |                                                                                    |      |     | 1                                                                                 | 0    | 1                                                                                 | 1                                                                                   | 2                                                                                   | 0    | 0    | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor             |                                                                                    |      |     | 0.92                                                                              | 0.92 | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92 | 0.92 | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         |                                                                                    |      |     | 2                                                                                 | 0    | 2                                                                                 | 6                                                                                   | 6                                                                                   | 0    | 0    | 7                                                                                   | 7                                                                                   |
| Cap, veh/h                   |                                                                                    |      |     | 570                                                                               | 0    | 489                                                                               | 533                                                                                 | 1932                                                                                | 0    | 0    | 1670                                                                                | 0                                                                                   |
| Arrive On Green              |                                                                                    |      |     | 0.31                                                                              | 0.00 | 0.31                                                                              | 0.16                                                                                | 0.57                                                                                | 0.00 | 0.00 | 0.34                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              |                                                                                    |      |     | 1845                                                                              | 0    | 1583                                                                              | 1707                                                                                | 3495                                                                                | 0    | 0    | 5167                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         |                                                                                    |      |     | 112                                                                               | 0    | 565                                                                               | 371                                                                                 | 1808                                                                                | 0    | 0    | 772                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     |                                                                                    |      |     | 1845                                                                              | 0    | 1583                                                                              | 1707                                                                                | 1703                                                                                | 0    | 0    | 1616                                                                                | 0                                                                                   |
| Q Serve(g_s), s              |                                                                                    |      |     | 2.9                                                                               | 0.0  | 20.0                                                                              | 8.3                                                                                 | 31.7                                                                                | 0.0  | 0.0  | 8.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        |                                                                                    |      |     | 2.9                                                                               | 0.0  | 20.0                                                                              | 8.3                                                                                 | 31.7                                                                                | 0.0  | 0.0  | 8.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 |                                                                                    |      |     | 1.00                                                                              |      | 1.00                                                                              | 1.00                                                                                |                                                                                     | 0.00 | 0.00 |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       |                                                                                    |      |     | 570                                                                               | 0    | 489                                                                               | 533                                                                                 | 1932                                                                                | 0    | 0    | 1670                                                                                | 0                                                                                   |
| V/C Ratio(X)                 |                                                                                    |      |     | 0.20                                                                              | 0.00 | 1.15                                                                              | 0.70                                                                                | 0.94                                                                                | 0.00 | 0.00 | 0.46                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        |                                                                                    |      |     | 570                                                                               | 0    | 489                                                                               | 549                                                                                 | 1948                                                                                | 0    | 0    | 1670                                                                                | 0                                                                                   |
| HCM Platoon Ratio            |                                                                                    |      |     | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           |                                                                                    |      |     | 1.00                                                                              | 0.00 | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00 | 0.00 | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     |                                                                                    |      |     | 16.4                                                                              | 0.0  | 22.3                                                                              | 10.6                                                                                | 12.9                                                                                | 0.0  | 0.0  | 16.5                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       |                                                                                    |      |     | 0.2                                                                               | 0.0  | 90.5                                                                              | 3.7                                                                                 | 9.2                                                                                 | 0.0  | 0.0  | 0.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    |                                                                                    |      |     | 0.0                                                                               | 0.0  | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0  | 0.0  | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     |                                                                                    |      |     | 1.5                                                                               | 0.0  | 20.9                                                                              | 4.4                                                                                 | 17.0                                                                                | 0.0  | 0.0  | 3.6                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         |                                                                                    |      |     | 16.6                                                                              | 0.0  | 112.9                                                                             | 14.3                                                                                | 22.1                                                                                | 0.0  | 0.0  | 16.7                                                                                | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                    |      |     | B                                                                                 |      | F                                                                                 | B                                                                                   | C                                                                                   |      |      | B                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                    |      |     |                                                                                   | 677  |                                                                                   |                                                                                     | 2179                                                                                |      |      | 772                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                    |      |     |                                                                                   | 97.0 |                                                                                   |                                                                                     | 20.8                                                                                |      |      | 16.7                                                                                |                                                                                     |
| Approach LOS                 |                                                                                    |      |     |                                                                                   | F    |                                                                                   |                                                                                     | C                                                                                   |      |      | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                  | 2    | 3   | 4                                                                                 | 5    | 6                                                                                 | 7                                                                                   | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                    | 2    |     |                                                                                   | 5    | 6                                                                                 |                                                                                     | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                    | 40.7 |     |                                                                                   | 14.4 | 26.3                                                                              |                                                                                     | 24.0                                                                                |      |      |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                    | 4.0  |     |                                                                                   | 4.0  | 4.0                                                                               |                                                                                     | 4.0                                                                                 |      |      |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                    | 37.0 |     |                                                                                   | 11.0 | 22.0                                                                              |                                                                                     | 20.0                                                                                |      |      |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                    | 33.7 |     |                                                                                   | 10.3 | 10.0                                                                              |                                                                                     | 22.0                                                                                |      |      |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                    | 3.0  |     |                                                                                   | 0.1  | 10.5                                                                              |                                                                                     | 0.0                                                                                 |      |      |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                    |      |     |                                                                                   |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                    |      |     | 34.1                                                                              |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                    |      |     | C                                                                                 |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 48                                                                                | 194                                                                               | 137                                                                               | 151                                                                               | 897                                                                               | 136                                                                               | 323                                                                                | 1027                                                                                | 40                                                                                  | 84                                                                                  | 900                                                                                 | 47                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1810                                                                               | 1810                                                                                | 1900                                                                                | 1792                                                                                | 1792                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 52                                                                                | 211                                                                               | 149                                                                               | 164                                                                               | 975                                                                               | 148                                                                               | 355                                                                                | 1129                                                                                | 44                                                                                  | 91                                                                                  | 978                                                                                 | 51                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 137                                                                               | 510                                                                               | 344                                                                               | 403                                                                               | 971                                                                               | 147                                                                               | 377                                                                                | 1417                                                                                | 55                                                                                  | 229                                                                                 | 1000                                                                                | 52                                                                                  |
| Arrive On Green              | 0.03                                                                              | 0.26                                                                              | 0.26                                                                              | 0.09                                                                              | 0.31                                                                              | 0.31                                                                              | 0.17                                                                               | 0.42                                                                                | 0.42                                                                                | 0.05                                                                                | 0.30                                                                                | 0.30                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 1949                                                                              | 1314                                                                              | 1774                                                                              | 3082                                                                              | 468                                                                               | 1723                                                                               | 3374                                                                                | 131                                                                                 | 1707                                                                                | 3293                                                                                | 172                                                                                 |
| Grp Volume(v), veh/h         | 52                                                                                | 183                                                                               | 177                                                                               | 164                                                                               | 560                                                                               | 563                                                                               | 355                                                                                | 575                                                                                 | 598                                                                                 | 91                                                                                  | 506                                                                                 | 523                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1560                                                                              | 1774                                                                              | 1770                                                                              | 1780                                                                              | 1723                                                                               | 1719                                                                                | 1786                                                                                | 1707                                                                                | 1703                                                                                | 1762                                                                                |
| Q Serve(g_s), s              | 2.0                                                                               | 7.9                                                                               | 8.4                                                                               | 5.7                                                                               | 28.0                                                                              | 28.0                                                                              | 13.6                                                                               | 25.9                                                                                | 25.9                                                                                | 3.2                                                                                 | 26.1                                                                                | 26.1                                                                                |
| Cycle Q Clear(g_c), s        | 2.0                                                                               | 7.9                                                                               | 8.4                                                                               | 5.7                                                                               | 28.0                                                                              | 28.0                                                                              | 13.6                                                                               | 25.9                                                                                | 25.9                                                                                | 3.2                                                                                 | 26.1                                                                                | 26.1                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.84                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                              | 1.00                                                                               |                                                                                     | 0.07                                                                                | 1.00                                                                                |                                                                                     | 0.10                                                                                |
| Lane Grp Cap(c), veh/h       | 137                                                                               | 446                                                                               | 409                                                                               | 403                                                                               | 557                                                                               | 561                                                                               | 377                                                                                | 722                                                                                 | 750                                                                                 | 229                                                                                 | 517                                                                                 | 535                                                                                 |
| V/C Ratio(X)                 | 0.38                                                                              | 0.41                                                                              | 0.43                                                                              | 0.41                                                                              | 1.00                                                                              | 1.00                                                                              | 0.94                                                                               | 0.80                                                                                | 0.80                                                                                | 0.40                                                                                | 0.98                                                                                | 0.98                                                                                |
| Avail Cap(c_a), veh/h        | 158                                                                               | 446                                                                               | 409                                                                               | 431                                                                               | 557                                                                               | 561                                                                               | 377                                                                                | 722                                                                                 | 750                                                                                 | 236                                                                                 | 517                                                                                 | 535                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 25.9                                                                              | 27.1                                                                              | 27.3                                                                              | 20.2                                                                              | 30.4                                                                              | 30.4                                                                              | 23.8                                                                               | 22.5                                                                                | 22.5                                                                                | 21.2                                                                                | 30.6                                                                                | 30.6                                                                                |
| Incr Delay (d2), s/veh       | 1.7                                                                               | 0.6                                                                               | 0.7                                                                               | 0.7                                                                               | 39.1                                                                              | 39.2                                                                              | 31.8                                                                               | 8.9                                                                                 | 8.6                                                                                 | 1.1                                                                                 | 34.4                                                                                | 33.8                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.0                                                                               | 3.8                                                                               | 3.7                                                                               | 2.8                                                                               | 19.5                                                                              | 19.7                                                                              | 11.9                                                                               | 14.1                                                                                | 14.6                                                                                | 1.6                                                                                 | 17.2                                                                                | 17.7                                                                                |
| LnGrp Delay(d),s/veh         | 27.6                                                                              | 27.7                                                                              | 28.0                                                                              | 20.8                                                                              | 69.5                                                                              | 69.7                                                                              | 55.6                                                                               | 31.4                                                                                | 31.1                                                                                | 22.3                                                                                | 65.1                                                                                | 64.4                                                                                |
| LnGrp LOS                    | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | F                                                                                 | F                                                                                 | E                                                                                  | C                                                                                   | C                                                                                   | C                                                                                   | E                                                                                   | E                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 412                                                                               |                                                                                   |                                                                                   | 1287                                                                              |                                                                                   |                                                                                    | 1528                                                                                |                                                                                     |                                                                                     | 1120                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 27.9                                                                              |                                                                                   |                                                                                   | 63.4                                                                              |                                                                                   |                                                                                    | 36.9                                                                                |                                                                                     |                                                                                     | 61.3                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 8.7                                                                               | 41.3                                                                              | 11.6                                                                              | 27.3                                                                              | 19.0                                                                              | 31.0                                                                              | 6.9                                                                                | 32.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 37.0                                                                              | 9.0                                                                               | 23.0                                                                              | 15.0                                                                              | 27.0                                                                              | 4.0                                                                                | 28.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 5.2                                                                               | 27.9                                                                              | 7.7                                                                               | 10.4                                                                              | 15.6                                                                              | 28.1                                                                              | 4.0                                                                                | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 7.2                                                                               | 0.1                                                                               | 6.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 50.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 4: Mtn Indus. Blvd./Jimmy Carter Blvd & US 29/L'Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 120                                                                               | 357                                                                               | 19                                                                                | 591                                                                               | 1325                                                                              | 293                                                                               | 40                                                                                 | 609                                                                                 | 189                                                                                 | 127                                                                                 | 570                                                                                 | 228                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                  | 8                                                                                   | 18                                                                                  | 7                                                                                   | 4                                                                                   | 14                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1827                                                                              | 1827                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1743                                                                               | 1743                                                                                | 1743                                                                                | 1776                                                                                | 1776                                                                                | 1776                                                                                |
| Adj Flow Rate, veh/h         | 135                                                                               | 401                                                                               | 21                                                                                | 642                                                                               | 1440                                                                              | 318                                                                               | 48                                                                                 | 725                                                                                 | 0                                                                                   | 138                                                                                 | 620                                                                                 | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                               | 0.84                                                                                | 0.84                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 9                                                                                  | 9                                                                                   | 9                                                                                   | 7                                                                                   | 7                                                                                   | 7                                                                                   |
| Cap, veh/h                   | 157                                                                               | 893                                                                               | 47                                                                                | 740                                                                               | 1463                                                                              | 315                                                                               | 207                                                                                | 736                                                                                 | 329                                                                                 | 177                                                                                 | 1087                                                                                | 486                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.27                                                                              | 0.27                                                                              | 0.28                                                                              | 0.50                                                                              | 0.50                                                                              | 0.22                                                                               | 0.22                                                                                | 0.00                                                                                | 0.06                                                                                | 0.32                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1740                                                                              | 3356                                                                              | 175                                                                               | 1792                                                                              | 2926                                                                              | 631                                                                               | 749                                                                                | 3312                                                                                | 1482                                                                                | 1691                                                                                | 3374                                                                                | 1509                                                                                |
| Grp Volume(v), veh/h         | 135                                                                               | 207                                                                               | 215                                                                               | 642                                                                               | 866                                                                               | 892                                                                               | 48                                                                                 | 725                                                                                 | 0                                                                                   | 138                                                                                 | 620                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1740                                                                              | 1736                                                                              | 1796                                                                              | 1792                                                                              | 1787                                                                              | 1770                                                                              | 749                                                                                | 1656                                                                                | 1482                                                                                | 1691                                                                                | 1687                                                                                | 1509                                                                                |
| Q Serve(g_s), s              | 4.0                                                                               | 8.9                                                                               | 9.0                                                                               | 21.8                                                                              | 42.3                                                                              | 45.0                                                                              | 5.1                                                                                | 19.6                                                                                | 0.0                                                                                 | 5.0                                                                                 | 13.7                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 4.0                                                                               | 8.9                                                                               | 9.0                                                                               | 21.8                                                                              | 42.3                                                                              | 45.0                                                                              | 9.9                                                                                | 19.6                                                                                | 0.0                                                                                 | 5.0                                                                                 | 13.7                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.10                                                                              | 1.00                                                                              |                                                                                   | 0.36                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 157                                                                               | 462                                                                               | 478                                                                               | 740                                                                               | 894                                                                               | 885                                                                               | 207                                                                                | 736                                                                                 | 329                                                                                 | 177                                                                                 | 1087                                                                                | 486                                                                                 |
| V/C Ratio(X)                 | 0.86                                                                              | 0.45                                                                              | 0.45                                                                              | 0.87                                                                              | 0.97                                                                              | 1.01                                                                              | 0.23                                                                               | 0.99                                                                                | 0.00                                                                                | 0.78                                                                                | 0.57                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 157                                                                               | 462                                                                               | 478                                                                               | 839                                                                               | 894                                                                               | 885                                                                               | 207                                                                                | 736                                                                                 | 329                                                                                 | 177                                                                                 | 1087                                                                                | 486                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 30.1                                                                              | 27.5                                                                              | 27.5                                                                              | 15.0                                                                              | 21.8                                                                              | 22.5                                                                              | 33.2                                                                               | 34.9                                                                                | 0.0                                                                                 | 28.3                                                                                | 25.3                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 34.8                                                                              | 0.7                                                                               | 0.7                                                                               | 8.8                                                                               | 22.8                                                                              | 32.2                                                                              | 0.6                                                                                | 29.4                                                                                | 0.0                                                                                 | 19.7                                                                                | 0.7                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 3.0                                                                               | 4.3                                                                               | 4.5                                                                               | 12.3                                                                              | 26.3                                                                              | 29.8                                                                              | 1.1                                                                                | 12.0                                                                                | 0.0                                                                                 | 2.1                                                                                 | 6.5                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 64.9                                                                              | 28.2                                                                              | 28.2                                                                              | 23.8                                                                              | 44.6                                                                              | 54.7                                                                              | 33.7                                                                               | 64.2                                                                                | 0.0                                                                                 | 48.0                                                                                | 26.0                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | E                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | D                                                                                 | F                                                                                 | C                                                                                  | E                                                                                   |                                                                                     | D                                                                                   | C                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 557                                                                               |                                                                                   |                                                                                   | 2400                                                                              |                                                                                   |                                                                                    | 773                                                                                 |                                                                                     |                                                                                     | 758                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 37.1                                                                              |                                                                                   |                                                                                   | 42.8                                                                              |                                                                                   |                                                                                    | 62.3                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 29.0                                                                              | 28.0                                                                              |                                                                                   | 33.0                                                                              | 8.0                                                                               | 49.0                                                                              | 9.0                                                                                | 24.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 30.0                                                                              | 19.0                                                                              |                                                                                   | 29.0                                                                              | 4.0                                                                               | 45.0                                                                              | 5.0                                                                                | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 23.8                                                                              | 11.0                                                                              |                                                                                   | 15.7                                                                              | 6.0                                                                               | 47.0                                                                              | 7.0                                                                                | 21.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 1.3                                                                               | 6.7                                                                               |                                                                                   | 7.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 43.3                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 5: US 29/L'Ville Hwy & SR 236/ Hugh Howell Rd

6/21/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |                                                                                   |  |  |  |                                                                                    |  |                                                                                     |  |  |  |
| Volume (veh/h)                                                       | 314                                                                               | 198                                                                               | 7                                                                                 | 2                                                                                 | 653                                                                               | 916                                                                               | 7                                                                                  | 14                                                                                  | 7                                                                                   | 211                                                                                 | 8                                                                                   | 612                                                                                 |
| Number                                                               | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1845                                                                                | 1845                                                                                | 1845                                                                                |
| Adj Flow Rate, veh/h                                                 | 353                                                                               | 222                                                                               | 8                                                                                 | 2                                                                                 | 710                                                                               | 0                                                                                 | 8                                                                                  | 16                                                                                  | 8                                                                                   | 261                                                                                 | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Peak Hour Factor                                                     | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                |
| Percent Heavy Veh, %                                                 | 6                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                                                           | 589                                                                               | 1714                                                                              | 62                                                                                | 408                                                                               | 1013                                                                              | 453                                                                               | 79                                                                                 | 158                                                                                 | 79                                                                                  | 625                                                                                 | 0                                                                                   | 279                                                                                 |
| Arrive On Green                                                      | 0.18                                                                              | 0.51                                                                              | 0.51                                                                              | 0.29                                                                              | 0.29                                                                              | 0.00                                                                              | 0.18                                                                               | 0.18                                                                                | 0.18                                                                                | 0.18                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3312                                                                              | 3354                                                                              | 120                                                                               | 1135                                                                              | 3505                                                                              | 1568                                                                              | 445                                                                                | 890                                                                                 | 445                                                                                 | 3514                                                                                | 0                                                                                   | 1568                                                                                |
| Grp Volume(v), veh/h                                                 | 353                                                                               | 112                                                                               | 118                                                                               | 2                                                                                 | 710                                                                               | 0                                                                                 | 32                                                                                 | 0                                                                                   | 0                                                                                   | 261                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1656                                                                              | 1703                                                                              | 1771                                                                              | 1135                                                                              | 1752                                                                              | 1568                                                                              | 1780                                                                               | 0                                                                                   | 0                                                                                   | 1757                                                                                | 0                                                                                   | 1568                                                                                |
| Q Serve(g_s), s                                                      | 8.8                                                                               | 3.1                                                                               | 3.1                                                                               | 0.1                                                                               | 16.3                                                                              | 0.0                                                                               | 1.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 5.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 8.8                                                                               | 3.1                                                                               | 3.1                                                                               | 0.1                                                                               | 16.3                                                                              | 0.0                                                                               | 1.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 5.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 0.07                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.25                                                                               |                                                                                     | 0.25                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 589                                                                               | 870                                                                               | 905                                                                               | 408                                                                               | 1013                                                                              | 453                                                                               | 317                                                                                | 0                                                                                   | 0                                                                                   | 625                                                                                 | 0                                                                                   | 279                                                                                 |
| V/C Ratio(X)                                                         | 0.60                                                                              | 0.13                                                                              | 0.13                                                                              | 0.00                                                                              | 0.70                                                                              | 0.00                                                                              | 0.10                                                                               | 0.00                                                                                | 0.00                                                                                | 0.42                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 589                                                                               | 870                                                                               | 905                                                                               | 408                                                                               | 1013                                                                              | 453                                                                               | 317                                                                                | 0                                                                                   | 0                                                                                   | 625                                                                                 | 0                                                                                   | 279                                                                                 |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 34.1                                                                              | 11.5                                                                              | 11.5                                                                              | 22.8                                                                              | 28.5                                                                              | 0.0                                                                               | 31.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 32.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 4.5                                                                               | 0.3                                                                               | 0.3                                                                               | 0.0                                                                               | 4.1                                                                               | 0.0                                                                               | 0.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 4.4                                                                               | 1.5                                                                               | 1.6                                                                               | 0.0                                                                               | 8.5                                                                               | 0.0                                                                               | 0.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 3.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 38.5                                                                              | 11.8                                                                              | 11.8                                                                              | 22.8                                                                              | 32.6                                                                              | 0.0                                                                               | 31.6                                                                               | 0.0                                                                                 | 0.0                                                                                 | 34.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 583                                                                               |                                                                                   |                                                                                   | 712                                                                               |                                                                                   |                                                                                    | 32                                                                                  |                                                                                     |                                                                                     | 261                                                                                 |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   | 32.6                                                                              |                                                                                   |                                                                                    | 31.6                                                                                |                                                                                     |                                                                                     | 34.9                                                                                |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 50.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 30.0                                                                              |                                                                                    | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          |                                                                                   | 46.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              | 26.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         |                                                                                   | 5.1                                                                               |                                                                                   | 3.4                                                                               | 10.8                                                                              | 18.3                                                                              |                                                                                    | 7.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              |                                                                                   | 6.6                                                                               |                                                                                   | 0.1                                                                               | 0.6                                                                               | 3.4                                                                               |                                                                                    | 0.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 31.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection             |        |      |        |       |        |      |
|--------------------------|--------|------|--------|-------|--------|------|
| Int Delay, s/veh         | 1.5    |      |        |       |        |      |
| Movement                 | EBT    | EBR  | WBL    | WBT   | NBL    | NBR  |
| Vol, veh/h               | 246    | 30   | 83     | 1219  | 11     | 9    |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0     | 0      | 0    |
| Sign Control             | Free   | Free | Free   | Free  | Stop   | Stop |
| RT Channelized           | -      | None | -      | None  | -      | None |
| Storage Length           | -      | -    | -      | -     | 0      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0     | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0     | 0      | -    |
| Peak Hour Factor         | 92     | 92   | 92     | 92    | 88     | 88   |
| Heavy Vehicles, %        | 5      | 5    | 1      | 1     | 5      | 5    |
| Mvmt Flow                | 267    | 33   | 90     | 1325  | 12     | 10   |
| Major/Minor              | Major1 |      | Major2 |       | Minor1 |      |
| Conflicting Flow All     | 0      | 0    | 300    | 0     | 1127   | 150  |
| Stage 1                  | -      | -    | -      | -     | 284    | -    |
| Stage 2                  | -      | -    | -      | -     | 843    | -    |
| Critical Hdwy            | -      | -    | 4.12   | -     | 6.9    | 7    |
| Critical Hdwy Stg 1      | -      | -    | -      | -     | 5.9    | -    |
| Critical Hdwy Stg 2      | -      | -    | -      | -     | 5.9    | -    |
| Follow-up Hdwy           | -      | -    | 2.21   | -     | 3.55   | 3.35 |
| Pot Cap-1 Maneuver       | -      | -    | 1265   | -     | 194    | 860  |
| Stage 1                  | -      | -    | -      | -     | 730    | -    |
| Stage 2                  | -      | -    | -      | -     | 375    | -    |
| Platoon blocked, %       | -      | -    | -      | -     | -      | -    |
| Mov Cap-1 Maneuver       | -      | -    | 1265   | -     | 142    | 860  |
| Mov Cap-2 Maneuver       | -      | -    | -      | -     | 142    | -    |
| Stage 1                  | -      | -    | -      | -     | 730    | -    |
| Stage 2                  | -      | -    | -      | -     | 274    | -    |
| Approach                 | EB     |      | WB     |       | NB     |      |
| HCM Control Delay, s     | 0      |      | 1.5    |       | 22.6   |      |
| HCM LOS                  |        |      |        |       | C      |      |
| Minor Lane/Major Mvmt    | NBLn1  | EBT  | EBR    | WBL   | WBT    |      |
| Capacity (veh/h)         | 227    | -    | -      | 1265  | -      |      |
| HCM Lane V/C Ratio       | 0.1    | -    | -      | 0.071 | -      |      |
| HCM Control Delay (s)    | 22.6   | -    | -      | 8.1   | 1      |      |
| HCM Lane LOS             | C      | -    | -      | A     | A      |      |
| HCM 95th %tile Q(veh)    | 0.3    | -    | -      | 0.2   | -      |      |

# HCM 2010 Signalized Intersection Summary

## 7: SR 236/Hugh Howell Rd

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)               | 2                                                                                 | 243                                                                               | 12                                                                                | 5                                                                                 | 1185                                                                              | 3                                                                                 | 72                                                                                 | 0                                                                                   | 10                                                                                  | 5                                                                                   | 0                                                                                   | 24                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1810                                                                              | 1810                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1900                                                                                | 1845                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 2                                                                                 | 264                                                                               | 0                                                                                 | 5                                                                                 | 1288                                                                              | 0                                                                                 | 87                                                                                 | 0                                                                                   | 12                                                                                  | 7                                                                                   | 0                                                                                   | 33                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.83                                                                               | 0.83                                                                                | 0.83                                                                                | 0.73                                                                                | 0.73                                                                                | 0.73                                                                                |
| Percent Heavy Veh, %         | 5                                                                                 | 5                                                                                 | 5                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   | 198                                                                               | 1397                                                                              | 0                                                                                 | 905                                                                               | 1444                                                                              | 0                                                                                 | 192                                                                                | 0                                                                                   | 16                                                                                  | 61                                                                                  | 12                                                                                  | 117                                                                                 |
| Arrive On Green              | 0.00                                                                              | 0.77                                                                              | 0.00                                                                              | 0.01                                                                              | 0.78                                                                              | 0.00                                                                              | 0.09                                                                               | 0.00                                                                                | 0.09                                                                                | 0.09                                                                                | 0.00                                                                                | 0.09                                                                                |
| Sat Flow, veh/h              | 1723                                                                              | 1810                                                                              | 0                                                                                 | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1330                                                                               | 0                                                                                   | 183                                                                                 | 148                                                                                 | 138                                                                                 | 1351                                                                                |
| Grp Volume(v), veh/h         | 2                                                                                 | 264                                                                               | 0                                                                                 | 5                                                                                 | 1288                                                                              | 0                                                                                 | 99                                                                                 | 0                                                                                   | 0                                                                                   | 40                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1723                                                                              | 1810                                                                              | 0                                                                                 | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1513                                                                               | 0                                                                                   | 0                                                                                   | 1638                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 3.4                                                                               | 0.0                                                                               | 0.1                                                                               | 44.4                                                                              | 0.0                                                                               | 3.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.0                                                                               | 3.4                                                                               | 0.0                                                                               | 0.1                                                                               | 44.4                                                                              | 0.0                                                                               | 5.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 0.88                                                                               |                                                                                     | 0.12                                                                                | 0.17                                                                                |                                                                                     | 0.82                                                                                |
| Lane Grp Cap(c), veh/h       | 198                                                                               | 1397                                                                              | 0                                                                                 | 905                                                                               | 1444                                                                              | 0                                                                                 | 208                                                                                | 0                                                                                   | 0                                                                                   | 190                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.01                                                                              | 0.19                                                                              | 0.00                                                                              | 0.01                                                                              | 0.89                                                                              | 0.00                                                                              | 0.48                                                                               | 0.00                                                                                | 0.00                                                                                | 0.21                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 273                                                                               | 1397                                                                              | 0                                                                                 | 977                                                                               | 1444                                                                              | 0                                                                                 | 342                                                                                | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 13.3                                                                              | 2.7                                                                               | 0.0                                                                               | 2.3                                                                               | 7.2                                                                               | 0.0                                                                               | 39.1                                                                               | 0.0                                                                                 | 0.0                                                                                 | 37.7                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 8.7                                                                               | 0.0                                                                               | 1.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.0                                                                               | 1.8                                                                               | 0.0                                                                               | 0.0                                                                               | 25.7                                                                              | 0.0                                                                               | 2.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 13.4                                                                              | 3.0                                                                               | 0.0                                                                               | 2.3                                                                               | 15.9                                                                              | 0.0                                                                               | 40.8                                                                               | 0.0                                                                                 | 0.0                                                                                 | 38.2                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | B                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | B                                                                                 |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 266                                                                               |                                                                                   |                                                                                   | 1293                                                                              |                                                                                   |                                                                                    | 99                                                                                  |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 3.1                                                                               |                                                                                   |                                                                                   | 15.9                                                                              |                                                                                   |                                                                                    | 40.8                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 4.5                                                                               | 72.0                                                                              |                                                                                   | 11.6                                                                              | 4.2                                                                               | 72.3                                                                              |                                                                                    | 11.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 68.0                                                                              |                                                                                   | 16.0                                                                              | 4.0                                                                               | 68.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.1                                                                               | 5.4                                                                               |                                                                                   | 7.5                                                                               | 2.0                                                                               | 46.4                                                                              |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 26.3                                                                              |                                                                                   | 0.4                                                                               | 0.0                                                                               | 14.6                                                                              |                                                                                    | 0.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 15.9                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection                                                                                                         |        |      |        |          |        |       |
|----------------------------------------------------------------------------------------------------------------------|--------|------|--------|----------|--------|-------|
| Int Delay, s/veh                                                                                                     | 86.7   |      |        |          |        |       |
|                                                                                                                      |        |      |        |          |        |       |
| Movement                                                                                                             | EBL    | EBT  | WBT    | WBR      | SWL    | SWR   |
| Vol, veh/h                                                                                                           | 59     | 205  | 756    | 5        | 7      | 411   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0      | 0        | 0      | 0     |
| Sign Control                                                                                                         | Free   | Free | Free   | Free     | Stop   | Stop  |
| RT Channelized                                                                                                       | -      | None | -      | None     | -      | None  |
| Storage Length                                                                                                       | 400    | -    | -      | -        | 0      | -     |
| Veh in Median Storage, #                                                                                             | -      | 0    | 0      | -        | 0      | -     |
| Grade, %                                                                                                             | -      | 0    | 0      | -        | 0      | -     |
| Peak Hour Factor                                                                                                     | 90     | 90   | 82     | 82       | 83     | 83    |
| Heavy Vehicles, %                                                                                                    | 3      | 3    | 2      | 2        | 1      | 1     |
| Mvmt Flow                                                                                                            | 66     | 228  | 922    | 6        | 8      | 495   |
|                                                                                                                      |        |      |        |          |        |       |
| Major/Minor                                                                                                          | Major1 |      | Major2 |          | Minor2 |       |
| Conflicting Flow All                                                                                                 | 928    | 0    | -      | 0        | 1284   | 925   |
| Stage 1                                                                                                              | -      | -    | -      | -        | 925    | -     |
| Stage 2                                                                                                              | -      | -    | -      | -        | 359    | -     |
| Critical Hdwy                                                                                                        | 4.13   | -    | -      | -        | 6.41   | 6.21  |
| Critical Hdwy Stg 1                                                                                                  | -      | -    | -      | -        | 5.41   | -     |
| Critical Hdwy Stg 2                                                                                                  | -      | -    | -      | -        | 5.41   | -     |
| Follow-up Hdwy                                                                                                       | 2.227  | -    | -      | -        | 3.509  | 3.309 |
| Pot Cap-1 Maneuver                                                                                                   | 733    | -    | -      | -        | 183    | ~ 328 |
| Stage 1                                                                                                              | -      | -    | -      | -        | 388    | -     |
| Stage 2                                                                                                              | -      | -    | -      | -        | 709    | -     |
| Platoon blocked, %                                                                                                   |        | -    | -      | -        |        |       |
| Mov Cap-1 Maneuver                                                                                                   | 733    | -    | -      | -        | 167    | ~ 328 |
| Mov Cap-2 Maneuver                                                                                                   | -      | -    | -      | -        | 167    | -     |
| Stage 1                                                                                                              | -      | -    | -      | -        | 388    | -     |
| Stage 2                                                                                                              | -      | -    | -      | -        | 645    | -     |
|                                                                                                                      |        |      |        |          |        |       |
| Approach                                                                                                             | EB     |      | WB     |          | SW     |       |
| HCM Control Delay, s                                                                                                 | 2.3    |      | 0      |          | 295.7  |       |
| HCM LOS                                                                                                              | F      |      |        |          |        |       |
|                                                                                                                      |        |      |        |          |        |       |
| Minor Lane/Major Mvmt                                                                                                | EBL    | EBT  | WBT    | WBRSWLn1 |        |       |
| Capacity (veh/h)                                                                                                     | 733    | -    | -      | -        | 323    |       |
| HCM Lane V/C Ratio                                                                                                   | 0.089  | -    | -      | -        | 1.559  |       |
| HCM Control Delay (s)                                                                                                | 10.4   | -    | -      | -        | 295.7  |       |
| HCM Lane LOS                                                                                                         | B      | -    | -      | -        | F      |       |
| HCM 95th %tile Q(veh)                                                                                                | 0.3    | -    | -      | -        | 29.1   |       |
| Notes                                                                                                                |        |      |        |          |        |       |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |        |          |        |       |

# HCM 2010 Signalized Intersection Summary

## 9: Silver Hill Rd & SR 236/Hugh Howell Rd

6/21/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | NBL                                                                               | NBR                                                                               | SET                                                                               | SER                                                                               | NWL                                                                               | NWT                                                                               |   |      |
| Lane Configurations                                                  |  |                                                                                   |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 150                                                                               | 16                                                                                | 248                                                                               | 46                                                                                | 14                                                                                | 687                                                                               |   |      |
| Number                                                               | 3                                                                                 | 18                                                                                | 6                                                                                 | 16                                                                                | 5                                                                                 | 2                                                                                 |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 170                                                                               | 18                                                                                | 299                                                                               | 55                                                                                | 16                                                                                | 763                                                                               |   |      |
| Adj No. of Lanes                                                     | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.88                                                                              | 0.88                                                                              | 0.83                                                                              | 0.83                                                                              | 0.90                                                                              | 0.90                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                                                           | 222                                                                               | 24                                                                                | 878                                                                               | 161                                                                               | 673                                                                               | 1272                                                                              |   |      |
| Arrive On Green                                                      | 0.14                                                                              | 0.14                                                                              | 0.58                                                                              | 0.58                                                                              | 0.02                                                                              | 0.68                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1578                                                                              | 167                                                                               | 1516                                                                              | 279                                                                               | 1774                                                                              | 1863                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 189                                                                               | 0                                                                                 | 0                                                                                 | 354                                                                               | 16                                                                                | 763                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1754                                                                              | 0                                                                                 | 0                                                                                 | 1795                                                                              | 1774                                                                              | 1863                                                                              |   |      |
| Q Serve(g_s), s                                                      | 4.7                                                                               | 0.0                                                                               | 0.0                                                                               | 4.7                                                                               | 0.1                                                                               | 10.0                                                                              |   |      |
| Cycle Q Clear(g_c), s                                                | 4.7                                                                               | 0.0                                                                               | 0.0                                                                               | 4.7                                                                               | 0.1                                                                               | 10.0                                                                              |   |      |
| Prop In Lane                                                         | 0.90                                                                              | 0.10                                                                              |                                                                                   | 0.16                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h                                               | 247                                                                               | 0                                                                                 | 0                                                                                 | 1039                                                                              | 673                                                                               | 1272                                                                              |   |      |
| V/C Ratio(X)                                                         | 0.76                                                                              | 0.00                                                                              | 0.00                                                                              | 0.34                                                                              | 0.02                                                                              | 0.60                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 618                                                                               | 0                                                                                 | 0                                                                                 | 1039                                                                              | 801                                                                               | 1272                                                                              |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 18.8                                                                              | 0.0                                                                               | 0.0                                                                               | 5.0                                                                               | 3.5                                                                               | 3.9                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 4.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.9                                                                               | 0.0                                                                               | 2.1                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.6                                                                               | 0.0                                                                               | 0.0                                                                               | 2.5                                                                               | 0.1                                                                               | 5.6                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 23.7                                                                              | 0.0                                                                               | 0.0                                                                               | 5.9                                                                               | 3.5                                                                               | 6.0                                                                               |   |      |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h                                                  | 189                                                                               |                                                                                   | 354                                                                               |                                                                                   |                                                                                   | 779                                                                               |   |      |
| Approach Delay, s/veh                                                | 23.7                                                                              |                                                                                   | 5.9                                                                               |                                                                                   |                                                                                   | 5.9                                                                               |   |      |
| Approach LOS                                                         | C                                                                                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   | 4.7                                                                               | 30.3                                                                              |   | 10.4 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 31.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 23.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 12.0                                                                              |                                                                                   |                                                                                   | 2.1                                                                               | 6.7                                                                               |   | 6.7  |
| Green Ext Time (p_c), s                                              |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 6.4                                                                               |   | 0.3  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 8.4                                                                               |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 10: Brockett Rd & US 29/L"Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 73                                                                                | 509                                                                               | 13                                                                                | 104                                                                               | 1075                                                                              | 163                                                                               | 118                                                                                 | 184                                                                                 | 201                                                                                 | 33                                                                                  | 44                                                                                  | 85                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                   | 8                                                                                   | 18                                                                                  | 7                                                                                   | 4                                                                                   | 14                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1827                                                                              | 1827                                                                              | 1900                                                                              | 1863                                                                                | 1863                                                                                | 1863                                                                                | 1792                                                                                | 1792                                                                                | 1792                                                                                |
| Adj Flow Rate, veh/h         | 80                                                                                | 559                                                                               | 14                                                                                | 117                                                                               | 1208                                                                              | 183                                                                               | 137                                                                                 | 214                                                                                 | 234                                                                                 | 39                                                                                  | 52                                                                                  | 101                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.84                                                                                | 0.84                                                                                | 0.84                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 2                                                                                   | 2                                                                                   | 2                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 202                                                                               | 1424                                                                              | 36                                                                                | 458                                                                               | 1313                                                                              | 198                                                                               | 463                                                                                 | 482                                                                                 | 410                                                                                 | 303                                                                                 | 415                                                                                 | 353                                                                                 |
| Arrive On Green              | 0.05                                                                              | 0.42                                                                              | 0.42                                                                              | 0.06                                                                              | 0.43                                                                              | 0.43                                                                              | 0.06                                                                                | 0.26                                                                                | 0.26                                                                                | 0.03                                                                                | 0.23                                                                                | 0.23                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 3395                                                                              | 85                                                                                | 1740                                                                              | 3026                                                                              | 456                                                                               | 1774                                                                                | 1863                                                                                | 1583                                                                                | 1707                                                                                | 1792                                                                                | 1524                                                                                |
| Grp Volume(v), veh/h         | 80                                                                                | 280                                                                               | 293                                                                               | 117                                                                               | 690                                                                               | 701                                                                               | 137                                                                                 | 214                                                                                 | 234                                                                                 | 39                                                                                  | 52                                                                                  | 101                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1777                                                                              | 1740                                                                              | 1736                                                                              | 1746                                                                              | 1774                                                                                | 1863                                                                                | 1583                                                                                | 1707                                                                                | 1792                                                                                | 1524                                                                                |
| Q Serve(g_s), s              | 1.8                                                                               | 7.9                                                                               | 7.9                                                                               | 2.6                                                                               | 25.9                                                                              | 26.2                                                                              | 4.0                                                                                 | 6.7                                                                                 | 8.9                                                                                 | 1.2                                                                                 | 1.6                                                                                 | 3.8                                                                                 |
| Cycle Q Clear(g_c), s        | 1.8                                                                               | 7.9                                                                               | 7.9                                                                               | 2.6                                                                               | 25.9                                                                              | 26.2                                                                              | 4.0                                                                                 | 6.7                                                                                 | 8.9                                                                                 | 1.2                                                                                 | 1.6                                                                                 | 3.8                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.05                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 202                                                                               | 714                                                                               | 746                                                                               | 458                                                                               | 753                                                                               | 758                                                                               | 463                                                                                 | 482                                                                                 | 410                                                                                 | 303                                                                                 | 415                                                                                 | 353                                                                                 |
| V/C Ratio(X)                 | 0.40                                                                              | 0.39                                                                              | 0.39                                                                              | 0.26                                                                              | 0.92                                                                              | 0.92                                                                              | 0.30                                                                                | 0.44                                                                                | 0.57                                                                                | 0.13                                                                                | 0.13                                                                                | 0.29                                                                                |
| Avail Cap(c_a), veh/h        | 223                                                                               | 714                                                                               | 746                                                                               | 505                                                                               | 753                                                                               | 758                                                                               | 463                                                                                 | 482                                                                                 | 410                                                                                 | 350                                                                                 | 415                                                                                 | 353                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 16.0                                                                              | 13.9                                                                              | 13.9                                                                              | 10.6                                                                              | 18.4                                                                              | 18.5                                                                              | 19.0                                                                                | 21.5                                                                                | 22.3                                                                                | 19.4                                                                                | 21.0                                                                                | 21.9                                                                                |
| Incr Delay (d2), s/veh       | 1.3                                                                               | 1.6                                                                               | 1.6                                                                               | 0.3                                                                               | 17.9                                                                              | 18.7                                                                              | 0.4                                                                                 | 2.9                                                                                 | 5.7                                                                                 | 0.2                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.9                                                                               | 4.0                                                                               | 4.1                                                                               | 1.2                                                                               | 16.0                                                                              | 16.4                                                                              | 0.1                                                                                 | 3.8                                                                                 | 4.5                                                                                 | 0.6                                                                                 | 0.9                                                                                 | 1.8                                                                                 |
| LnGrp Delay(d),s/veh         | 17.2                                                                              | 15.6                                                                              | 15.5                                                                              | 10.9                                                                              | 36.2                                                                              | 37.2                                                                              | 19.3                                                                                | 24.4                                                                                | 28.0                                                                                | 19.6                                                                                | 21.7                                                                                | 23.9                                                                                |
| LnGrp LOS                    | B                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | D                                                                                 | D                                                                                 | B                                                                                   | C                                                                                   | C                                                                                   | B                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 1508                                                                              |                                                                                   |                                                                                     | 585                                                                                 |                                                                                     |                                                                                     | 192                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 15.7                                                                              |                                                                                   |                                                                                   | 34.7                                                                              |                                                                                   |                                                                                     | 24.6                                                                                |                                                                                     |                                                                                     | 22.4                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 8.1                                                                               | 33.0                                                                              | 8.0                                                                               | 20.0                                                                              | 7.1                                                                               | 34.0                                                                              | 6.1                                                                                 | 21.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 28.0                                                                              | 4.0                                                                               | 16.0                                                                              | 4.0                                                                               | 30.0                                                                              | 4.0                                                                                 | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 4.6                                                                               | 9.9                                                                               | 6.0                                                                               | 5.8                                                                               | 3.8                                                                               | 28.2                                                                              | 3.2                                                                                 | 10.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 11.5                                                                              | 0.0                                                                               | 2.0                                                                               | 0.0                                                                               | 1.5                                                                               | 0.0                                                                                 | 1.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 27.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 11: Idlewood Rd/Main St & US 29/L'Ville Hwy

6/21/2016

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|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 118                                                                               | 381                                                                               | 116                                                                               | 122                                                                               | 1095                                                                              | 79                                                                                | 116                                                                                | 254                                                                                 | 113                                                                                 | 42                                                                                  | 140                                                                                 | 42                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                  | 8                                                                                   | 18                                                                                  | 7                                                                                   | 4                                                                                   | 14                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1863                                                                               | 1863                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1810                                                                                |
| Adj Flow Rate, veh/h         | 130                                                                               | 419                                                                               | 127                                                                               | 137                                                                               | 1230                                                                              | 89                                                                                | 129                                                                                | 282                                                                                 | 126                                                                                 | 51                                                                                  | 169                                                                                 | 51                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 237                                                                               | 1107                                                                              | 332                                                                               | 485                                                                               | 1457                                                                              | 105                                                                               | 381                                                                                | 304                                                                                 | 136                                                                                 | 182                                                                                 | 376                                                                                 | 319                                                                                 |
| Arrive On Green              | 0.06                                                                              | 0.43                                                                              | 0.43                                                                              | 0.07                                                                              | 0.44                                                                              | 0.44                                                                              | 0.08                                                                               | 0.25                                                                                | 0.25                                                                                | 0.04                                                                                | 0.21                                                                                | 0.21                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 2583                                                                              | 775                                                                               | 1757                                                                              | 3315                                                                              | 240                                                                               | 1774                                                                               | 1221                                                                                | 546                                                                                 | 1723                                                                                | 1810                                                                                | 1538                                                                                |
| Grp Volume(v), veh/h         | 130                                                                               | 275                                                                               | 271                                                                               | 137                                                                               | 649                                                                               | 670                                                                               | 129                                                                                | 0                                                                                   | 408                                                                                 | 51                                                                                  | 169                                                                                 | 51                                                                                  |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1656                                                                              | 1757                                                                              | 1752                                                                              | 1802                                                                              | 1774                                                                               | 0                                                                                   | 1766                                                                                | 1723                                                                                | 1810                                                                                | 1538                                                                                |
| Q Serve(g_s), s              | 3.1                                                                               | 8.0                                                                               | 8.1                                                                               | 3.1                                                                               | 23.9                                                                              | 24.0                                                                              | 4.0                                                                                | 0.0                                                                                 | 16.3                                                                                | 1.7                                                                                 | 5.9                                                                                 | 2.0                                                                                 |
| Cycle Q Clear(g_c), s        | 3.1                                                                               | 8.0                                                                               | 8.1                                                                               | 3.1                                                                               | 23.9                                                                              | 24.0                                                                              | 4.0                                                                                | 0.0                                                                                 | 16.3                                                                                | 1.7                                                                                 | 5.9                                                                                 | 2.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.47                                                                              | 1.00                                                                              |                                                                                   | 0.13                                                                              | 1.00                                                                               |                                                                                     | 0.31                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 237                                                                               | 730                                                                               | 709                                                                               | 485                                                                               | 770                                                                               | 792                                                                               | 381                                                                                | 0                                                                                   | 439                                                                                 | 182                                                                                 | 376                                                                                 | 319                                                                                 |
| V/C Ratio(X)                 | 0.55                                                                              | 0.38                                                                              | 0.38                                                                              | 0.28                                                                              | 0.84                                                                              | 0.85                                                                              | 0.34                                                                               | 0.00                                                                                | 0.93                                                                                | 0.28                                                                                | 0.45                                                                                | 0.16                                                                                |
| Avail Cap(c_a), veh/h        | 237                                                                               | 730                                                                               | 709                                                                               | 514                                                                               | 799                                                                               | 822                                                                               | 392                                                                                | 0                                                                                   | 439                                                                                 | 217                                                                                 | 400                                                                                 | 340                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 15.8                                                                              | 14.1                                                                              | 14.1                                                                              | 10.6                                                                              | 18.1                                                                              | 18.1                                                                              | 19.6                                                                               | 0.0                                                                                 | 26.6                                                                                | 22.7                                                                                | 25.1                                                                                | 23.5                                                                                |
| Incr Delay (d2), s/veh       | 2.7                                                                               | 1.5                                                                               | 1.6                                                                               | 0.3                                                                               | 8.0                                                                               | 7.9                                                                               | 0.5                                                                                | 0.0                                                                                 | 26.1                                                                                | 0.8                                                                                 | 0.8                                                                                 | 0.2                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.6                                                                               | 4.0                                                                               | 4.0                                                                               | 1.5                                                                               | 13.1                                                                              | 13.7                                                                              | 2.0                                                                                | 0.0                                                                                 | 11.1                                                                                | 0.8                                                                                 | 3.0                                                                                 | 0.8                                                                                 |
| LnGrp Delay(d),s/veh         | 18.5                                                                              | 15.6                                                                              | 15.7                                                                              | 10.9                                                                              | 26.0                                                                              | 26.0                                                                              | 20.1                                                                               | 0.0                                                                                 | 52.6                                                                                | 23.5                                                                                | 25.9                                                                                | 23.7                                                                                |
| LnGrp LOS                    | B                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 | C                                                                                  |                                                                                     | D                                                                                   | C                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 676                                                                               |                                                                                   |                                                                                   | 1456                                                                              |                                                                                   |                                                                                    | 537                                                                                 |                                                                                     |                                                                                     | 271                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 16.2                                                                              |                                                                                   |                                                                                   | 24.6                                                                              |                                                                                   |                                                                                    | 44.8                                                                                |                                                                                     |                                                                                     | 25.0                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 8.8                                                                               | 35.0                                                                              | 9.5                                                                               | 19.0                                                                              | 8.0                                                                               | 35.8                                                                              | 6.6                                                                                | 22.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 31.0                                                                              | 6.0                                                                               | 16.0                                                                              | 4.0                                                                               | 33.0                                                                              | 4.0                                                                                | 18.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 5.1                                                                               | 10.1                                                                              | 6.0                                                                               | 7.9                                                                               | 5.1                                                                               | 26.0                                                                              | 3.7                                                                                | 18.3                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 11.9                                                                              | 0.0                                                                               | 2.3                                                                               | 0.0                                                                               | 5.3                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 26.4                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 12: SR 236/Hugh Howell Rd & Silver Hill Rd

6/21/2016

|                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
|                              |  |  |  |  |  |  |  |      |
| Movement                     | WBL                                                                               | WBR                                                                               | SEL                                                                               | SET                                                                               | NWT                                                                               | NWR                                                                               |                                                                                   |      |
| Lane Configurations          |  |  |  |  |  |  |                                                                                   |      |
| Volume (veh/h)               | 49                                                                                | 157                                                                               | 110                                                                               | 152                                                                               | 542                                                                               | 40                                                                                |                                                                                   |      |
| Number                       | 1                                                                                 | 16                                                                                | 7                                                                                 | 4                                                                                 | 8                                                                                 | 18                                                                                |                                                                                   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |      |
| Adj Sat Flow, veh/h/ln       | 1827                                                                              | 1827                                                                              | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              |                                                                                   |      |
| Adj Flow Rate, veh/h         | 57                                                                                | 0                                                                                 | 141                                                                               | 195                                                                               | 630                                                                               | 47                                                                                |                                                                                   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |      |
| Peak Hour Factor             | 0.86                                                                              | 0.86                                                                              | 0.78                                                                              | 0.78                                                                              | 0.86                                                                              | 0.86                                                                              |                                                                                   |      |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |                                                                                   |      |
| Cap, veh/h                   | 79                                                                                | 71                                                                                | 583                                                                               | 1439                                                                              | 1040                                                                              | 78                                                                                |                                                                                   |      |
| Arrive On Green              | 0.05                                                                              | 0.00                                                                              | 0.07                                                                              | 0.77                                                                              | 0.61                                                                              | 0.61                                                                              |                                                                                   |      |
| Sat Flow, veh/h              | 1740                                                                              | 1553                                                                              | 1774                                                                              | 1863                                                                              | 1712                                                                              | 128                                                                               |                                                                                   |      |
| Grp Volume(v), veh/h         | 57                                                                                | 0                                                                                 | 141                                                                               | 195                                                                               | 0                                                                                 | 677                                                                               |                                                                                   |      |
| Grp Sat Flow(s),veh/h/ln     | 1740                                                                              | 1553                                                                              | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1840                                                                              |                                                                                   |      |
| Q Serve(g_s), s              | 1.4                                                                               | 0.0                                                                               | 1.0                                                                               | 1.2                                                                               | 0.0                                                                               | 10.1                                                                              |                                                                                   |      |
| Cycle Q Clear(g_c), s        | 1.4                                                                               | 0.0                                                                               | 1.0                                                                               | 1.2                                                                               | 0.0                                                                               | 10.1                                                                              |                                                                                   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |                                                                                   |      |
| Lane Grp Cap(c), veh/h       | 79                                                                                | 71                                                                                | 583                                                                               | 1439                                                                              | 0                                                                                 | 1117                                                                              |                                                                                   |      |
| V/C Ratio(X)                 | 0.72                                                                              | 0.00                                                                              | 0.24                                                                              | 0.14                                                                              | 0.00                                                                              | 0.61                                                                              |                                                                                   |      |
| Avail Cap(c_a), veh/h        | 712                                                                               | 635                                                                               | 612                                                                               | 1439                                                                              | 0                                                                                 | 1117                                                                              |                                                                                   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |      |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              |                                                                                   |      |
| Uniform Delay (d), s/veh     | 20.7                                                                              | 0.0                                                                               | 3.8                                                                               | 1.3                                                                               | 0.0                                                                               | 5.4                                                                               |                                                                                   |      |
| Incr Delay (d2), s/veh       | 11.5                                                                              | 0.0                                                                               | 0.2                                                                               | 0.2                                                                               | 0.0                                                                               | 2.4                                                                               |                                                                                   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |      |
| %ile BackOfQ(50%),veh/ln     | 0.9                                                                               | 0.0                                                                               | 0.6                                                                               | 0.7                                                                               | 0.0                                                                               | 5.6                                                                               |                                                                                   |      |
| LnGrp Delay(d),s/veh         | 32.2                                                                              | 0.0                                                                               | 4.0                                                                               | 1.5                                                                               | 0.0                                                                               | 7.8                                                                               |                                                                                   |      |
| LnGrp LOS                    | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 |                                                                                   |      |
| Approach Vol, veh/h          | 57                                                                                |                                                                                   |                                                                                   | 336                                                                               | 677                                                                               |                                                                                   |                                                                                   |      |
| Approach Delay, s/veh        | 32.2                                                                              |                                                                                   |                                                                                   | 2.5                                                                               | 7.8                                                                               |                                                                                   |                                                                                   |      |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                 | 8    |
| Assigned Phs                 |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 | 7                                                                                 | 8    |
| Phs Duration (G+Y+Rc), s     |                                                                                   |                                                                                   |                                                                                   | 38.0                                                                              |                                                                                   | 6.0                                                                               | 7.3                                                                               | 30.7 |
| Change Period (Y+Rc), s      |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0  |
| Max Green Setting (Gmax), s  |                                                                                   |                                                                                   |                                                                                   | 34.0                                                                              |                                                                                   | 18.0                                                                              | 4.0                                                                               | 26.0 |
| Max Q Clear Time (g_c+l1), s |                                                                                   |                                                                                   |                                                                                   | 3.2                                                                               |                                                                                   | 3.4                                                                               | 3.0                                                                               | 12.1 |
| Green Ext Time (p_c), s      |                                                                                   |                                                                                   |                                                                                   | 5.9                                                                               |                                                                                   | 0.1                                                                               | 0.0                                                                               | 4.5  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |

# HCM 2010 Signalized Intersection Summary

## 1: Mtn Indus Blvd & US 78 WB Off Ramp/US 78 WB On Ramp

6/21/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |  |  |  |                                                                                     |
| Volume (veh/h)                                                       | 462                                                                               | 0                                                                                 | 277                                                                               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1083                                                                                | 183                                                                                 | 454                                                                                 | 1316                                                                                | 0                                                                                   |
| Number                                                               | 7                                                                                 | 4                                                                                 | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1681                                                                              | 1681                                                                              | 1681                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1810                                                                                | 1810                                                                                | 1845                                                                                | 1845                                                                                | 0                                                                                   |
| Adj Flow Rate, veh/h                                                 | 544                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1231                                                                                | 0                                                                                   | 493                                                                                 | 1430                                                                                | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 3                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor                                                     | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                                 | 13                                                                                | 13                                                                                | 13                                                                                |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5                                                                                   | 5                                                                                   | 3                                                                                   | 3                                                                                   | 0                                                                                   |
| Cap, veh/h                                                           | 674                                                                               | 0                                                                                 | 301                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1962                                                                                | 611                                                                                 | 546                                                                                 | 2300                                                                                | 0                                                                                   |
| Arrive On Green                                                      | 0.21                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.40                                                                                | 0.00                                                                                | 0.19                                                                                | 0.66                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3203                                                                              | 0                                                                                 | 1429                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5103                                                                                | 1538                                                                                | 1757                                                                                | 3597                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h                                                 | 544                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1231                                                                                | 0                                                                                   | 493                                                                                 | 1430                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1601                                                                              | 0                                                                                 | 1429                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1647                                                                                | 1538                                                                                | 1757                                                                                | 1752                                                                                | 0                                                                                   |
| Q Serve(g_s), s                                                      | 9.7                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.0                                                                                | 0.0                                                                                 | 9.0                                                                                 | 14.2                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 9.7                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.0                                                                                | 0.0                                                                                 | 9.0                                                                                 | 14.2                                                                                | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 674                                                                               | 0                                                                                 | 301                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1962                                                                                | 611                                                                                 | 546                                                                                 | 2300                                                                                | 0                                                                                   |
| V/C Ratio(X)                                                         | 0.81                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.63                                                                                | 0.00                                                                                | 0.90                                                                                | 0.62                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 854                                                                               | 0                                                                                 | 381                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1962                                                                                | 611                                                                                 | 618                                                                                 | 2300                                                                                | 0                                                                                   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 1.00                                                                                | 0.00                                                                                | 0.22                                                                                | 0.22                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 22.5                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 14.5                                                                                | 0.0                                                                                 | 10.7                                                                                | 6.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 4.6                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 1.5                                                                                 | 0.0                                                                                 | 4.2                                                                                 | 0.3                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 4.7                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 5.6                                                                                 | 0.0                                                                                 | 4.9                                                                                 | 6.8                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 27.1                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 16.1                                                                                | 0.0                                                                                 | 14.9                                                                                | 6.3                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 544                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1231                                                                                |                                                                                     |                                                                                     | 1923                                                                                |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 27.1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 16.1                                                                                |                                                                                     |                                                                                     | 8.5                                                                                 |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             | 15.5                                                                              | 27.8                                                                              |                                                                                   | 16.6                                                                              |                                                                                   | 43.4                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          | 14.0                                                                              | 18.0                                                                              |                                                                                   | 16.0                                                                              |                                                                                   | 36.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         | 11.0                                                                              | 14.0                                                                              |                                                                                   | 11.7                                                                              |                                                                                   | 16.2                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              | 0.5                                                                               | 3.7                                                                               |                                                                                   | 0.9                                                                               |                                                                                   | 16.3                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 13.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/21/2016

|                              |  |      |     |                                                                                   |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
|------------------------------|------------------------------------------------------------------------------------|------|-----|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                                | EBT  | EBR | WBL                                                                               | WBT  | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR  | SBL  | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                    |      |     |  |      |  |  |  |      |      |  |  |
| Volume (veh/h)               | 0                                                                                  | 0    | 0   | 63                                                                                | 0    | 181                                                                               | 301                                                                                 | 1280                                                                                | 0    | 0    | 1704                                                                                | 711                                                                                 |
| Number                       |                                                                                    |      |     | 3                                                                                 | 8    | 18                                                                                | 5                                                                                   | 2                                                                                   | 12   | 1    | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          |                                                                                    |      |     | 0                                                                                 | 0    | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0    | 0    | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          |                                                                                    |      |     | 1.00                                                                              |      | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00 | 1.00 |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             |                                                                                    |      |     | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       |                                                                                    |      |     | 1918                                                                              | 0    | 1845                                                                              | 1792                                                                                | 1792                                                                                | 0    | 0    | 1839                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         |                                                                                    |      |     | 70                                                                                | 0    | 201                                                                               | 342                                                                                 | 1455                                                                                | 0    | 0    | 1852                                                                                | 0                                                                                   |
| Adj No. of Lanes             |                                                                                    |      |     | 1                                                                                 | 0    | 1                                                                                 | 1                                                                                   | 2                                                                                   | 0    | 0    | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor             |                                                                                    |      |     | 0.90                                                                              | 0.90 | 0.90                                                                              | 0.88                                                                                | 0.88                                                                                | 0.88 | 0.92 | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         |                                                                                    |      |     | 3                                                                                 | 0    | 3                                                                                 | 6                                                                                   | 6                                                                                   | 0    | 0    | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   |                                                                                    |      |     | 274                                                                               | 0    | 235                                                                               | 379                                                                                 | 2593                                                                                | 0    | 0    | 2969                                                                                | 0                                                                                   |
| Arrive On Green              |                                                                                    |      |     | 0.15                                                                              | 0.00 | 0.15                                                                              | 0.13                                                                                | 0.76                                                                                | 0.00 | 0.00 | 0.59                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              |                                                                                    |      |     | 1827                                                                              | 0    | 1568                                                                              | 1707                                                                                | 3495                                                                                | 0    | 0    | 5353                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         |                                                                                    |      |     | 70                                                                                | 0    | 201                                                                               | 342                                                                                 | 1455                                                                                | 0    | 0    | 1852                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     |                                                                                    |      |     | 1827                                                                              | 0    | 1568                                                                              | 1707                                                                                | 1703                                                                                | 0    | 0    | 1674                                                                                | 0                                                                                   |
| Q Serve(g_s), s              |                                                                                    |      |     | 3.0                                                                               | 0.0  | 11.3                                                                              | 8.9                                                                                 | 16.0                                                                                | 0.0  | 0.0  | 21.5                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        |                                                                                    |      |     | 3.0                                                                               | 0.0  | 11.3                                                                              | 8.9                                                                                 | 16.0                                                                                | 0.0  | 0.0  | 21.5                                                                                | 0.0                                                                                 |
| Prop In Lane                 |                                                                                    |      |     | 1.00                                                                              |      | 1.00                                                                              | 1.00                                                                                |                                                                                     | 0.00 | 0.00 |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       |                                                                                    |      |     | 274                                                                               | 0    | 235                                                                               | 379                                                                                 | 2593                                                                                | 0    | 0    | 2969                                                                                | 0                                                                                   |
| V/C Ratio(X)                 |                                                                                    |      |     | 0.26                                                                              | 0.00 | 0.86                                                                              | 0.90                                                                                | 0.56                                                                                | 0.00 | 0.00 | 0.62                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        |                                                                                    |      |     | 325                                                                               | 0    | 279                                                                               | 449                                                                                 | 2593                                                                                | 0    | 0    | 2969                                                                                | 0                                                                                   |
| HCM Platoon Ratio            |                                                                                    |      |     | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           |                                                                                    |      |     | 1.00                                                                              | 0.00 | 1.00                                                                              | 0.53                                                                                | 0.53                                                                                | 0.00 | 0.00 | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     |                                                                                    |      |     | 33.8                                                                              | 0.0  | 37.3                                                                              | 21.0                                                                                | 4.5                                                                                 | 0.0  | 0.0  | 11.9                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       |                                                                                    |      |     | 0.5                                                                               | 0.0  | 19.7                                                                              | 11.7                                                                                | 0.5                                                                                 | 0.0  | 0.0  | 1.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    |                                                                                    |      |     | 0.0                                                                               | 0.0  | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0  | 0.0  | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     |                                                                                    |      |     | 1.6                                                                               | 0.0  | 6.1                                                                               | 9.5                                                                                 | 7.4                                                                                 | 0.0  | 0.0  | 10.0                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         |                                                                                    |      |     | 34.3                                                                              | 0.0  | 57.0                                                                              | 32.7                                                                                | 4.9                                                                                 | 0.0  | 0.0  | 12.9                                                                                | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                    |      |     | C                                                                                 |      | E                                                                                 | C                                                                                   | A                                                                                   |      |      | B                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                    |      |     |                                                                                   | 271  |                                                                                   |                                                                                     | 1797                                                                                |      |      | 1852                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                    |      |     |                                                                                   | 51.1 |                                                                                   |                                                                                     | 10.2                                                                                |      |      | 12.9                                                                                |                                                                                     |
| Approach LOS                 |                                                                                    |      |     |                                                                                   | D    |                                                                                   |                                                                                     | B                                                                                   |      |      | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                  | 2    | 3   | 4                                                                                 | 5    | 6                                                                                 | 7                                                                                   | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                    | 2    |     |                                                                                   | 5    | 6                                                                                 |                                                                                     | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                    | 72.5 |     |                                                                                   | 15.3 | 57.2                                                                              |                                                                                     | 17.5                                                                                |      |      |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                    | 4.0  |     |                                                                                   | 4.0  | 4.0                                                                               |                                                                                     | 4.0                                                                                 |      |      |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                    | 66.0 |     |                                                                                   | 15.0 | 47.0                                                                              |                                                                                     | 16.0                                                                                |      |      |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                    | 18.0 |     |                                                                                   | 10.9 | 23.5                                                                              |                                                                                     | 13.3                                                                                |      |      |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                    | 39.8 |     |                                                                                   | 0.4  | 21.3                                                                              |                                                                                     | 0.2                                                                                 |      |      |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                    |      |     |                                                                                   |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                    |      |     | 14.3                                                                              |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                    |      |     | B                                                                                 |      |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 83                                                                                | 794                                                                               | 239                                                                               | 94                                                                                | 314                                                                               | 64                                                                                | 207                                                                                | 819                                                                                 | 119                                                                                 | 251                                                                                 | 1100                                                                                | 63                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1792                                                                               | 1792                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 90                                                                                | 863                                                                               | 260                                                                               | 102                                                                               | 341                                                                               | 70                                                                                | 225                                                                                | 890                                                                                 | 129                                                                                 | 273                                                                                 | 1196                                                                                | 68                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 6                                                                                  | 6                                                                                   | 6                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 375                                                                               | 835                                                                               | 251                                                                               | 158                                                                               | 885                                                                               | 180                                                                               | 254                                                                                | 1029                                                                                | 149                                                                                 | 326                                                                                 | 1213                                                                                | 69                                                                                  |
| Arrive On Green              | 0.05                                                                              | 0.31                                                                              | 0.31                                                                              | 0.04                                                                              | 0.30                                                                              | 0.30                                                                              | 0.10                                                                               | 0.34                                                                                | 0.34                                                                                | 0.12                                                                                | 0.37                                                                                | 0.37                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 2683                                                                              | 807                                                                               | 1757                                                                              | 2904                                                                              | 589                                                                               | 1707                                                                               | 2986                                                                                | 433                                                                                 | 1723                                                                                | 3308                                                                                | 188                                                                                 |
| Grp Volume(v), veh/h         | 90                                                                                | 569                                                                               | 554                                                                               | 102                                                                               | 204                                                                               | 207                                                                               | 225                                                                                | 508                                                                                 | 511                                                                                 | 273                                                                                 | 621                                                                                 | 643                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1720                                                                              | 1757                                                                              | 1752                                                                              | 1741                                                                              | 1707                                                                               | 1703                                                                                | 1716                                                                                | 1723                                                                                | 1719                                                                                | 1776                                                                                |
| Q Serve(g_s), s              | 3.1                                                                               | 28.0                                                                              | 28.0                                                                              | 3.6                                                                               | 8.3                                                                               | 8.4                                                                               | 7.6                                                                                | 25.0                                                                                | 25.1                                                                                | 9.0                                                                                 | 32.2                                                                                | 32.3                                                                                |
| Cycle Q Clear(g_c), s        | 3.1                                                                               | 28.0                                                                              | 28.0                                                                              | 3.6                                                                               | 8.3                                                                               | 8.4                                                                               | 7.6                                                                                | 25.0                                                                                | 25.1                                                                                | 9.0                                                                                 | 32.2                                                                                | 32.3                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.47                                                                              | 1.00                                                                              |                                                                                   | 0.34                                                                              | 1.00                                                                               |                                                                                     | 0.25                                                                                | 1.00                                                                                |                                                                                     | 0.11                                                                                |
| Lane Grp Cap(c), veh/h       | 375                                                                               | 551                                                                               | 535                                                                               | 158                                                                               | 534                                                                               | 531                                                                               | 254                                                                                | 587                                                                                 | 591                                                                                 | 326                                                                                 | 630                                                                                 | 651                                                                                 |
| V/C Ratio(X)                 | 0.24                                                                              | 1.03                                                                              | 1.04                                                                              | 0.65                                                                              | 0.38                                                                              | 0.39                                                                              | 0.89                                                                               | 0.87                                                                                | 0.87                                                                                | 0.84                                                                                | 0.99                                                                                | 0.99                                                                                |
| Avail Cap(c_a), veh/h        | 384                                                                               | 551                                                                               | 535                                                                               | 158                                                                               | 534                                                                               | 531                                                                               | 254                                                                                | 587                                                                                 | 591                                                                                 | 326                                                                                 | 630                                                                                 | 651                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 20.1                                                                              | 31.0                                                                              | 31.0                                                                              | 24.4                                                                              | 24.6                                                                              | 24.7                                                                              | 21.3                                                                               | 27.5                                                                                | 27.6                                                                                | 20.2                                                                                | 28.3                                                                                | 28.3                                                                                |
| Incr Delay (d2), s/veh       | 0.3                                                                               | 47.2                                                                              | 48.3                                                                              | 8.7                                                                               | 0.4                                                                               | 0.5                                                                               | 29.0                                                                               | 15.7                                                                                | 15.6                                                                                | 17.2                                                                                | 32.5                                                                                | 32.2                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.5                                                                               | 20.8                                                                              | 20.4                                                                              | 2.1                                                                               | 4.0                                                                               | 4.1                                                                               | 5.5                                                                                | 14.3                                                                                | 14.3                                                                                | 5.7                                                                                 | 20.9                                                                                | 21.5                                                                                |
| LnGrp Delay(d),s/veh         | 20.5                                                                              | 78.2                                                                              | 79.3                                                                              | 33.1                                                                              | 25.1                                                                              | 25.1                                                                              | 50.3                                                                               | 43.2                                                                                | 43.1                                                                                | 37.3                                                                                | 60.7                                                                                | 60.5                                                                                |
| LnGrp LOS                    | C                                                                                 | F                                                                                 | F                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | D                                                                                  | D                                                                                   | D                                                                                   | D                                                                                   | E                                                                                   | E                                                                                   |
| Approach Vol, veh/h          | 1213                                                                              |                                                                                   |                                                                                   | 513                                                                               |                                                                                   |                                                                                   | 1244                                                                               |                                                                                     |                                                                                     | 1537                                                                                |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 74.4                                                                              |                                                                                   |                                                                                   | 26.7                                                                              |                                                                                   |                                                                                   | 44.5                                                                               |                                                                                     |                                                                                     | 56.5                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | E                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 15.0                                                                              | 35.0                                                                              | 8.0                                                                               | 32.0                                                                              | 13.0                                                                              | 37.0                                                                              | 8.6                                                                                | 31.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 11.0                                                                              | 31.0                                                                              | 4.0                                                                               | 28.0                                                                              | 9.0                                                                               | 33.0                                                                              | 5.0                                                                                | 27.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 11.0                                                                              | 27.1                                                                              | 5.6                                                                               | 30.0                                                                              | 9.6                                                                               | 34.3                                                                              | 5.1                                                                                | 10.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 3.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 8.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 54.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 4: Mtn Indus. Blvd./Jimmy Carter Blvd & US 29/L'Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 239                                                                               | 1168                                                                              | 31                                                                                | 226                                                                               | 600                                                                               | 162                                                                               | 30                                                                                 | 609                                                                                 | 576                                                                                 | 256                                                                                 | 907                                                                                 | 280                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1827                                                                               | 1827                                                                                | 1827                                                                                | 1845                                                                                | 1845                                                                                | 1845                                                                                |
| Adj Flow Rate, veh/h         | 260                                                                               | 1270                                                                              | 34                                                                                | 246                                                                               | 652                                                                               | 176                                                                               | 34                                                                                 | 692                                                                                 | 0                                                                                   | 278                                                                                 | 986                                                                                 | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                  | 4                                                                                   | 4                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   | 401                                                                               | 1268                                                                              | 34                                                                                | 283                                                                               | 950                                                                               | 256                                                                               | 167                                                                                | 741                                                                                 | 331                                                                                 | 296                                                                                 | 1308                                                                                | 585                                                                                 |
| Arrive On Green              | 0.12                                                                              | 0.36                                                                              | 0.36                                                                              | 0.11                                                                              | 0.35                                                                              | 0.35                                                                              | 0.21                                                                               | 0.21                                                                                | 0.00                                                                                | 0.11                                                                                | 0.37                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3521                                                                              | 94                                                                                | 1757                                                                              | 2731                                                                              | 736                                                                               | 558                                                                                | 3471                                                                                | 1553                                                                                | 1757                                                                                | 3505                                                                                | 1568                                                                                |
| Grp Volume(v), veh/h         | 260                                                                               | 638                                                                               | 666                                                                               | 246                                                                               | 418                                                                               | 410                                                                               | 34                                                                                 | 692                                                                                 | 0                                                                                   | 278                                                                                 | 986                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1846                                                                              | 1757                                                                              | 1752                                                                              | 1715                                                                              | 558                                                                                | 1736                                                                                | 1553                                                                                | 1757                                                                                | 1752                                                                                | 1568                                                                                |
| Q Serve(g_s), s              | 6.9                                                                               | 27.0                                                                              | 27.0                                                                              | 6.7                                                                               | 15.3                                                                              | 15.4                                                                              | 4.2                                                                                | 14.7                                                                                | 0.0                                                                                 | 8.0                                                                                 | 18.4                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 6.9                                                                               | 27.0                                                                              | 27.0                                                                              | 6.7                                                                               | 15.3                                                                              | 15.4                                                                              | 10.6                                                                               | 14.7                                                                                | 0.0                                                                                 | 8.0                                                                                 | 18.4                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.05                                                                              | 1.00                                                                              |                                                                                   | 0.43                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 401                                                                               | 637                                                                               | 665                                                                               | 283                                                                               | 609                                                                               | 596                                                                               | 167                                                                                | 741                                                                                 | 331                                                                                 | 296                                                                                 | 1308                                                                                | 585                                                                                 |
| V/C Ratio(X)                 | 0.65                                                                              | 1.00                                                                              | 1.00                                                                              | 0.87                                                                              | 0.69                                                                              | 0.69                                                                              | 0.20                                                                               | 0.93                                                                                | 0.00                                                                                | 0.94                                                                                | 0.75                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 427                                                                               | 637                                                                               | 665                                                                               | 283                                                                               | 609                                                                               | 596                                                                               | 167                                                                                | 741                                                                                 | 331                                                                                 | 296                                                                                 | 1308                                                                                | 585                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 15.1                                                                              | 24.0                                                                              | 24.0                                                                              | 17.5                                                                              | 21.0                                                                              | 21.0                                                                              | 30.4                                                                               | 29.0                                                                                | 0.0                                                                                 | 22.6                                                                                | 20.5                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 3.1                                                                               | 36.0                                                                              | 35.5                                                                              | 23.7                                                                              | 3.2                                                                               | 3.3                                                                               | 2.7                                                                                | 20.5                                                                                | 0.0                                                                                 | 36.2                                                                                | 4.1                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 3.6                                                                               | 19.5                                                                              | 20.2                                                                              | 5.0                                                                               | 8.0                                                                               | 7.8                                                                               | 0.8                                                                                | 9.1                                                                                 | 0.0                                                                                 | 4.9                                                                                 | 9.6                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 18.2                                                                              | 60.0                                                                              | 59.5                                                                              | 41.2                                                                              | 24.2                                                                              | 24.3                                                                              | 33.1                                                                               | 49.5                                                                                | 0.0                                                                                 | 58.8                                                                                | 24.5                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | B                                                                                 | F                                                                                 | F                                                                                 | D                                                                                 | C                                                                                 | C                                                                                 | C                                                                                  | D                                                                                   |                                                                                     | E                                                                                   | C                                                                                   |                                                                                     |
| Approach Vol, veh/h          | 1564                                                                              |                                                                                   |                                                                                   |                                                                                   | 1074                                                                              |                                                                                   |                                                                                    |                                                                                     | 726                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 52.8                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.1                                                                              |                                                                                   |                                                                                    |                                                                                     | 48.7                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 |                                                                                   | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 12.0                                                                              | 20.0                                                                              | 12.0                                                                              | 31.0                                                                              |                                                                                   | 32.0                                                                              | 12.9                                                                               | 30.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 8.0                                                                               | 16.0                                                                              | 8.0                                                                               | 27.0                                                                              |                                                                                   | 28.0                                                                              | 10.0                                                                               | 25.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 10.0                                                                              | 16.7                                                                              | 8.7                                                                               | 29.0                                                                              |                                                                                   | 20.4                                                                              | 8.9                                                                                | 17.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 5.5                                                                               | 0.1                                                                                | 6.1                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 40.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 5: US 29/L'Ville Hwy & SR 236/ Hugh Howell Rd

6/21/2016

|                                                                      |                                                                                    |                                                                                    |  |  |                                                                                    |  |  |                                                                                      |  |  |                                                                                      |  |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                                                                                                                 | EBT                                                                                                                                                                 | EBR                                                                               | WBL                                                                               | WBT                                                                                                                                                                 | WBR                                                                               | NBL                                                                                | NBT                                                                                                                                                                     | NBR                                                                                 | SBL                                                                                 | SBT                                                                                                                                                                     | SBR                                                                                 |
| Lane Configurations                                                  |   |   |                                                                                   |  |   |  |                                                                                    |   |                                                                                     |  |   |  |
| Volume (veh/h)                                                       | 679                                                                                                                                                                 | 688                                                                                                                                                                 | 14                                                                                | 1                                                                                 | 355                                                                                                                                                                 | 465                                                                               | 7                                                                                  | 15                                                                                                                                                                      | 1                                                                                   | 809                                                                                 | 19                                                                                                                                                                      | 730                                                                                 |
| Number                                                               | 5                                                                                                                                                                   | 2                                                                                                                                                                   | 12                                                                                | 1                                                                                 | 6                                                                                                                                                                   | 16                                                                                | 3                                                                                  | 8                                                                                                                                                                       | 18                                                                                  | 7                                                                                   | 4                                                                                                                                                                       | 14                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                                                                                                       | 0                                                                                   | 0                                                                                   | 0                                                                                                                                                                       | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                              |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                               |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                |                                                                                                                                                                         | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1863                                                                                                                                                                | 1863                                                                                                                                                                | 1900                                                                              | 1863                                                                              | 1863                                                                                                                                                                | 1863                                                                              | 1900                                                                               | 1881                                                                                                                                                                    | 1900                                                                                | 1881                                                                                | 1881                                                                                                                                                                    | 1881                                                                                |
| Adj Flow Rate, veh/h                                                 | 738                                                                                                                                                                 | 748                                                                                                                                                                 | 15                                                                                | 1                                                                                 | 408                                                                                                                                                                 | 0                                                                                 | 12                                                                                 | 25                                                                                                                                                                      | 2                                                                                   | 904                                                                                 | 0                                                                                                                                                                       | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                                                                                                   | 2                                                                                                                                                                   | 0                                                                                 | 1                                                                                 | 2                                                                                                                                                                   | 1                                                                                 | 0                                                                                  | 1                                                                                                                                                                       | 0                                                                                   | 2                                                                                   | 0                                                                                                                                                                       | 1                                                                                   |
| Peak Hour Factor                                                     | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.87                                                                              | 0.87                                                                                                                                                                | 0.87                                                                              | 0.60                                                                               | 0.60                                                                                                                                                                    | 0.60                                                                                | 0.91                                                                                | 0.91                                                                                                                                                                    | 0.91                                                                                |
| Percent Heavy Veh, %                                                 | 2                                                                                                                                                                   | 2                                                                                                                                                                   | 2                                                                                 | 2                                                                                 | 2                                                                                                                                                                   | 2                                                                                 | 1                                                                                  | 1                                                                                                                                                                       | 1                                                                                   | 1                                                                                   | 1                                                                                                                                                                       | 1                                                                                   |
| Cap, veh/h                                                           | 727                                                                                                                                                                 | 1538                                                                                                                                                                | 31                                                                                | 205                                                                               | 629                                                                                                                                                                 | 281                                                                               | 100                                                                                | 209                                                                                                                                                                     | 17                                                                                  | 916                                                                                 | 0                                                                                                                                                                       | 409                                                                                 |
| Arrive On Green                                                      | 0.21                                                                                                                                                                | 0.43                                                                                                                                                                | 0.43                                                                              | 0.18                                                                              | 0.18                                                                                                                                                                | 0.00                                                                              | 0.18                                                                               | 0.18                                                                                                                                                                    | 0.18                                                                                | 0.26                                                                                | 0.00                                                                                                                                                                    | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3442                                                                                                                                                                | 3549                                                                                                                                                                | 71                                                                                | 701                                                                               | 3539                                                                                                                                                                | 1583                                                                              | 565                                                                                | 1177                                                                                                                                                                    | 94                                                                                  | 3583                                                                                | 0                                                                                                                                                                       | 1599                                                                                |
| Grp Volume(v), veh/h                                                 | 738                                                                                                                                                                 | 373                                                                                                                                                                 | 390                                                                               | 1                                                                                 | 408                                                                                                                                                                 | 0                                                                                 | 39                                                                                 | 0                                                                                                                                                                       | 0                                                                                   | 904                                                                                 | 0                                                                                                                                                                       | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1721                                                                                                                                                                | 1770                                                                                                                                                                | 1850                                                                              | 701                                                                               | 1770                                                                                                                                                                | 1583                                                                              | 1836                                                                               | 0                                                                                                                                                                       | 0                                                                                   | 1792                                                                                | 0                                                                                                                                                                       | 1599                                                                                |
| Q Serve(g_s), s                                                      | 19.0                                                                                                                                                                | 13.6                                                                                                                                                                | 13.6                                                                              | 0.1                                                                               | 9.6                                                                                                                                                                 | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 22.6                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 19.0                                                                                                                                                                | 13.6                                                                                                                                                                | 13.6                                                                              | 0.1                                                                               | 9.6                                                                                                                                                                 | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 22.6                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                                                                                                                |                                                                                                                                                                     | 0.04                                                                              | 1.00                                                                              |                                                                                                                                                                     | 1.00                                                                              | 0.31                                                                               |                                                                                                                                                                         | 0.05                                                                                | 1.00                                                                                |                                                                                                                                                                         | 1.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 727                                                                                                                                                                 | 767                                                                                                                                                                 | 802                                                                               | 205                                                                               | 629                                                                                                                                                                 | 281                                                                               | 326                                                                                | 0                                                                                                                                                                       | 0                                                                                   | 916                                                                                 | 0                                                                                                                                                                       | 409                                                                                 |
| V/C Ratio(X)                                                         | 1.02                                                                                                                                                                | 0.49                                                                                                                                                                | 0.49                                                                              | 0.00                                                                              | 0.65                                                                                                                                                                | 0.00                                                                              | 0.12                                                                               | 0.00                                                                                                                                                                    | 0.00                                                                                | 0.99                                                                                | 0.00                                                                                                                                                                    | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 727                                                                                                                                                                 | 767                                                                                                                                                                 | 802                                                                               | 205                                                                               | 629                                                                                                                                                                 | 281                                                                               | 326                                                                                | 0                                                                                                                                                                       | 0                                                                                   | 916                                                                                 | 0                                                                                                                                                                       | 409                                                                                 |
| HCM Platoon Ratio                                                    | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                                                                                                | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                                                                                                    | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                                                                                                    | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 35.5                                                                                                                                                                | 18.3                                                                                                                                                                | 18.3                                                                              | 30.5                                                                              | 34.4                                                                                                                                                                | 0.0                                                                               | 31.1                                                                               | 0.0                                                                                                                                                                     | 0.0                                                                                 | 33.4                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 37.4                                                                                                                                                                | 2.2                                                                                                                                                                 | 2.1                                                                               | 0.0                                                                               | 5.1                                                                                                                                                                 | 0.0                                                                               | 0.7                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 26.8                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 12.8                                                                                                                                                                | 7.1                                                                                                                                                                 | 7.4                                                                               | 0.0                                                                               | 5.2                                                                                                                                                                 | 0.0                                                                               | 0.9                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 14.6                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 72.9                                                                                                                                                                | 20.5                                                                                                                                                                | 20.4                                                                              | 30.5                                                                              | 39.5                                                                                                                                                                | 0.0                                                                               | 31.8                                                                               | 0.0                                                                                                                                                                     | 0.0                                                                                 | 60.2                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| LnGrp LOS                                                            | F                                                                                                                                                                   | C                                                                                                                                                                   | C                                                                                 | C                                                                                 | D                                                                                                                                                                   |                                                                                   | C                                                                                  |                                                                                                                                                                         |                                                                                     | E                                                                                   |                                                                                                                                                                         |                                                                                     |
| Approach Vol, veh/h                                                  | 1501                                                                                                                                                                |                                                                                                                                                                     |                                                                                   | 409                                                                               |                                                                                                                                                                     |                                                                                   | 39                                                                                 |                                                                                                                                                                         |                                                                                     | 904                                                                                 |                                                                                                                                                                         |                                                                                     |
| Approach Delay, s/veh                                                | 46.2                                                                                                                                                                |                                                                                                                                                                     |                                                                                   | 39.5                                                                              |                                                                                                                                                                     |                                                                                   | 31.8                                                                               |                                                                                                                                                                         |                                                                                     | 60.2                                                                                |                                                                                                                                                                         |                                                                                     |
| Approach LOS                                                         | D                                                                                                                                                                   |                                                                                                                                                                     |                                                                                   | D                                                                                 |                                                                                                                                                                     |                                                                                   | C                                                                                  |                                                                                                                                                                         |                                                                                     | E                                                                                   |                                                                                                                                                                         |                                                                                     |
| Timer                                                                | 1                                                                                                                                                                   | 2                                                                                                                                                                   | 3                                                                                 | 4                                                                                 | 5                                                                                                                                                                   | 6                                                                                 | 7                                                                                  | 8                                                                                                                                                                       |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Assigned Phs                                                         |                                                                                                                                                                     | 2                                                                                                                                                                   |                                                                                   | 4                                                                                 | 5                                                                                                                                                                   | 6                                                                                 |                                                                                    | 8                                                                                                                                                                       |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             |                                                                                                                                                                     | 43.0                                                                                                                                                                |                                                                                   | 27.0                                                                              | 23.0                                                                                                                                                                | 20.0                                                                              |                                                                                    | 20.0                                                                                                                                                                    |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Change Period (Y+Rc), s                                              |                                                                                                                                                                     | 4.0                                                                                                                                                                 |                                                                                   | 4.0                                                                               | 4.0                                                                                                                                                                 | 4.0                                                                               |                                                                                    | 4.0                                                                                                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Max Green Setting (Gmax), s                                          |                                                                                                                                                                     | 39.0                                                                                                                                                                |                                                                                   | 23.0                                                                              | 19.0                                                                                                                                                                | 16.0                                                                              |                                                                                    | 16.0                                                                                                                                                                    |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         |                                                                                                                                                                     | 15.6                                                                                                                                                                |                                                                                   | 24.6                                                                              | 21.0                                                                                                                                                                | 11.6                                                                              |                                                                                    | 3.6                                                                                                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Green Ext Time (p_c), s                                              |                                                                                                                                                                     | 7.2                                                                                                                                                                 |                                                                                   | 0.0                                                                               | 0.0                                                                                                                                                                 | 2.5                                                                               |                                                                                    | 0.1                                                                                                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Intersection Summary                                                 |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| HCM 2010 Ctrl Delay                                                  | 49.5                                                                                                                                                                |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| HCM 2010 LOS                                                         | D                                                                                                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| Notes                                                                |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                     |

| Intersection             |        |      |        |       |        |      |
|--------------------------|--------|------|--------|-------|--------|------|
| Int Delay, s/veh         | 9.2    |      |        |       |        |      |
| Movement                 | EBT    | EBR  | WBL    | WBT   | NBL    | NBR  |
| Vol, veh/h               | 1185   | 18   | 14     | 414   | 33     | 138  |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0     | 0      | 0    |
| Sign Control             | Free   | Free | Free   | Free  | Stop   | Stop |
| RT Channelized           | -      | None | -      | None  | -      | None |
| Storage Length           | -      | -    | -      | -     | 0      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0     | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0     | 0      | -    |
| Peak Hour Factor         | 92     | 92   | 88     | 88    | 74     | 74   |
| Heavy Vehicles, %        | 1      | 1    | 3      | 3     | 3      | 3    |
| Mvmt Flow                | 1288   | 20   | 16     | 470   | 45     | 186  |
| Major/Minor              | Major1 |      | Major2 |       | Minor1 |      |
| Conflicting Flow All     | 0      | 0    | 1308   | 0     | 1565   | 654  |
| Stage 1                  | -      | -    | -      | -     | 1298   | -    |
| Stage 2                  | -      | -    | -      | -     | 267    | -    |
| Critical Hdwy            | -      | -    | 4.16   | -     | 6.86   | 6.96 |
| Critical Hdwy Stg 1      | -      | -    | -      | -     | 5.86   | -    |
| Critical Hdwy Stg 2      | -      | -    | -      | -     | 5.86   | -    |
| Follow-up Hdwy           | -      | -    | 2.23   | -     | 3.53   | 3.33 |
| Pot Cap-1 Maneuver       | -      | -    | 520    | -     | 101    | 407  |
| Stage 1                  | -      | -    | -      | -     | 218    | -    |
| Stage 2                  | -      | -    | -      | -     | 751    | -    |
| Platoon blocked, %       | -      | -    | -      | -     | -      | -    |
| Mov Cap-1 Maneuver       | -      | -    | 520    | -     | 97     | 407  |
| Mov Cap-2 Maneuver       | -      | -    | -      | -     | 97     | -    |
| Stage 1                  | -      | -    | -      | -     | 218    | -    |
| Stage 2                  | -      | -    | -      | -     | 719    | -    |
| Approach                 | EB     |      | WB     |       | NB     |      |
| HCM Control Delay, s     | 0      |      | 0.6    |       | 79.6   |      |
| HCM LOS                  |        |      |        |       | F      |      |
| Minor Lane/Major Mvmt    | NBLn1  | EBT  | EBR    | WBL   | WBT    |      |
| Capacity (veh/h)         | 252    | -    | -      | 520   | -      |      |
| HCM Lane V/C Ratio       | 0.917  | -    | -      | 0.031 | -      |      |
| HCM Control Delay (s)    | 79.6   | -    | -      | 12.1  | 0.2    |      |
| HCM Lane LOS             | F      | -    | -      | B     | A      |      |
| HCM 95th %tile Q(veh)    | 8.1    | -    | -      | 0.1   | -      |      |

HCM 2010 Signalized Intersection Summary  
7: SR 236/Hugh Howell Rd

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)               | 13                                                                                | 1214                                                                              | 46                                                                                | 19                                                                                | 396                                                                               | 1                                                                                 | 24                                                                                 | 0                                                                                   | 19                                                                                  | 2                                                                                   | 0                                                                                   | 8                                                                                   |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1900                                                                                | 1863                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 14                                                                                | 1320                                                                              | 0                                                                                 | 22                                                                                | 460                                                                               | 0                                                                                 | 31                                                                                 | 0                                                                                   | 25                                                                                  | 3                                                                                   | 0                                                                                   | 12                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.77                                                                               | 0.77                                                                                | 0.77                                                                                | 0.69                                                                                | 0.69                                                                                | 0.69                                                                                |
| Percent Heavy Veh, %         | 1                                                                                 | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 802                                                                               | 1520                                                                              | 0                                                                                 | 253                                                                               | 1501                                                                              | 0                                                                                 | 98                                                                                 | 2                                                                                   | 34                                                                                  | 54                                                                                  | 7                                                                                   | 66                                                                                  |
| Arrive On Green              | 0.01                                                                              | 0.81                                                                              | 0.00                                                                              | 0.02                                                                              | 0.81                                                                              | 0.00                                                                              | 0.05                                                                               | 0.00                                                                                | 0.05                                                                                | 0.05                                                                                | 0.00                                                                                | 0.05                                                                                |
| Sat Flow, veh/h              | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1757                                                                              | 1845                                                                              | 0                                                                                 | 814                                                                                | 42                                                                                  | 690                                                                                 | 198                                                                                 | 136                                                                                 | 1335                                                                                |
| Grp Volume(v), veh/h         | 14                                                                                | 1320                                                                              | 0                                                                                 | 22                                                                                | 460                                                                               | 0                                                                                 | 56                                                                                 | 0                                                                                   | 0                                                                                   | 15                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1757                                                                              | 1845                                                                              | 0                                                                                 | 1546                                                                               | 0                                                                                   | 0                                                                                   | 1669                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.1                                                                               | 43.6                                                                              | 0.0                                                                               | 0.2                                                                               | 6.0                                                                               | 0.0                                                                               | 2.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.1                                                                               | 43.6                                                                              | 0.0                                                                               | 0.2                                                                               | 6.0                                                                               | 0.0                                                                               | 3.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 0.55                                                                               |                                                                                     | 0.45                                                                                | 0.20                                                                                |                                                                                     | 0.80                                                                                |
| Lane Grp Cap(c), veh/h       | 802                                                                               | 1520                                                                              | 0                                                                                 | 253                                                                               | 1501                                                                              | 0                                                                                 | 134                                                                                | 0                                                                                   | 0                                                                                   | 127                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.02                                                                              | 0.87                                                                              | 0.00                                                                              | 0.09                                                                              | 0.31                                                                              | 0.00                                                                              | 0.42                                                                               | 0.00                                                                                | 0.00                                                                                | 0.12                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 853                                                                               | 1520                                                                              | 0                                                                                 | 294                                                                               | 1501                                                                              | 0                                                                                 | 308                                                                                | 0                                                                                   | 0                                                                                   | 306                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 1.7                                                                               | 6.0                                                                               | 0.0                                                                               | 11.9                                                                              | 2.2                                                                               | 0.0                                                                               | 45.2                                                                               | 0.0                                                                                 | 0.0                                                                                 | 44.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 7.0                                                                               | 0.0                                                                               | 0.1                                                                               | 0.5                                                                               | 0.0                                                                               | 2.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.1                                                                               | 24.6                                                                              | 0.0                                                                               | 0.3                                                                               | 3.2                                                                               | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 1.7                                                                               | 13.0                                                                              | 0.0                                                                               | 12.0                                                                              | 2.8                                                                               | 0.0                                                                               | 47.3                                                                               | 0.0                                                                                 | 0.0                                                                                 | 44.4                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | A                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | A                                                                                 |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 1334                                                                              |                                                                                   |                                                                                   | 482                                                                               |                                                                                   |                                                                                    | 56                                                                                  |                                                                                     |                                                                                     | 15                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 3.2                                                                               |                                                                                   |                                                                                    | 47.3                                                                                |                                                                                     |                                                                                     | 44.4                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 5.8                                                                               | 82.0                                                                              |                                                                                   | 8.7                                                                               | 5.3                                                                               | 82.5                                                                              |                                                                                    | 8.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 78.0                                                                              |                                                                                   | 16.0                                                                              | 4.0                                                                               | 78.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 2.2                                                                               | 45.6                                                                              |                                                                                   | 5.4                                                                               | 2.1                                                                               | 8.0                                                                               |                                                                                    | 2.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 20.2                                                                              |                                                                                   | 0.2                                                                               | 0.0                                                                               | 29.6                                                                              |                                                                                    | 0.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection             |        |      |        |          |        |       |
|--------------------------|--------|------|--------|----------|--------|-------|
| Int Delay, s/veh         | 3.4    |      |        |          |        |       |
| Movement                 | EBL    | EBT  | WBT    | WBR      | SWL    | SWR   |
| Vol, veh/h               | 367    | 871  | 279    | 5        | 4      | 142   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0        | 0      | 0     |
| Sign Control             | Free   | Free | Free   | Free     | Stop   | Stop  |
| RT Channelized           | -      | None | -      | None     | -      | None  |
| Storage Length           | 400    | -    | -      | -        | 0      | -     |
| Veh in Median Storage, # | -      | 0    | 0      | -        | 0      | -     |
| Grade, %                 | -      | 0    | 0      | -        | 0      | -     |
| Peak Hour Factor         | 92     | 92   | 85     | 85       | 91     | 91    |
| Heavy Vehicles, %        | 1      | 1    | 3      | 3        | 1      | 1     |
| Mvmt Flow                | 399    | 947  | 328    | 6        | 4      | 156   |
| Major/Minor              | Major1 |      | Major2 |          | Minor2 |       |
| Conflicting Flow All     | 334    | 0    | -      | 0        | 2076   | 331   |
| Stage 1                  | -      | -    | -      | -        | 331    | -     |
| Stage 2                  | -      | -    | -      | -        | 1745   | -     |
| Critical Hdwy            | 4.11   | -    | -      | -        | 6.41   | 6.21  |
| Critical Hdwy Stg 1      | -      | -    | -      | -        | 5.41   | -     |
| Critical Hdwy Stg 2      | -      | -    | -      | -        | 5.41   | -     |
| Follow-up Hdwy           | 2.209  | -    | -      | -        | 3.509  | 3.309 |
| Pot Cap-1 Maneuver       | 1231   | -    | -      | -        | 59     | 713   |
| Stage 1                  | -      | -    | -      | -        | 730    | -     |
| Stage 2                  | -      | -    | -      | -        | 155    | -     |
| Platoon blocked, %       | -      | -    | -      | -        | -      | -     |
| Mov Cap-1 Maneuver       | 1231   | -    | -      | -        | 40     | 713   |
| Mov Cap-2 Maneuver       | -      | -    | -      | -        | 40     | -     |
| Stage 1                  | -      | -    | -      | -        | 730    | -     |
| Stage 2                  | -      | -    | -      | -        | 105    | -     |
| Approach                 | EB     |      | WB     |          | SW     |       |
| HCM Control Delay, s     | 2.8    |      | 0      |          | 15.9   |       |
| HCM LOS                  |        |      |        |          | C      |       |
| Minor Lane/Major Mvmt    | EBL    | EBT  | WBT    | WBRSWLn1 |        |       |
| Capacity (veh/h)         | 1231   | -    | -      | -        | 488    |       |
| HCM Lane V/C Ratio       | 0.324  | -    | -      | -        | 0.329  |       |
| HCM Control Delay (s)    | 9.3    | -    | -      | -        | 15.9   |       |
| HCM Lane LOS             | A      | -    | -      | -        | C      |       |
| HCM 95th %tile Q(veh)    | 1.4    | -    | -      | -        | 1.4    |       |

# HCM 2010 Signalized Intersection Summary

## 9: Silver Hill Rd & SR 236/Hugh Howell Rd

6/21/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | NBL                                                                               | NBR                                                                               | SET                                                                               | SER                                                                               | NWL                                                                               | NWT                                                                               |   |      |
| Lane Configurations                                                  |  |                                                                                   |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 58                                                                                | 15                                                                                | 842                                                                               | 216                                                                               | 12                                                                                | 272                                                                               |   |      |
| Number                                                               | 3                                                                                 | 18                                                                                | 6                                                                                 | 16                                                                                | 5                                                                                 | 2                                                                                 |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1881                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 85                                                                                | 22                                                                                | 915                                                                               | 235                                                                               | 14                                                                                | 316                                                                               |   |      |
| Adj No. of Lanes                                                     | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.68                                                                              | 0.68                                                                              | 0.92                                                                              | 0.92                                                                              | 0.86                                                                              | 0.86                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Cap, veh/h                                                           | 109                                                                               | 28                                                                                | 1095                                                                              | 281                                                                               | 280                                                                               | 1544                                                                              |   |      |
| Arrive On Green                                                      | 0.08                                                                              | 0.08                                                                              | 0.76                                                                              | 0.76                                                                              | 0.01                                                                              | 0.82                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1377                                                                              | 356                                                                               | 1445                                                                              | 371                                                                               | 1792                                                                              | 1881                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 108                                                                               | 0                                                                                 | 0                                                                                 | 1150                                                                              | 14                                                                                | 316                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1749                                                                              | 0                                                                                 | 0                                                                                 | 1816                                                                              | 1792                                                                              | 1881                                                                              |   |      |
| Q Serve(g_s), s                                                      | 4.9                                                                               | 0.0                                                                               | 0.0                                                                               | 33.6                                                                              | 0.1                                                                               | 2.9                                                                               |   |      |
| Cycle Q Clear(g_c), s                                                | 4.9                                                                               | 0.0                                                                               | 0.0                                                                               | 33.6                                                                              | 0.1                                                                               | 2.9                                                                               |   |      |
| Prop In Lane                                                         | 0.79                                                                              | 0.20                                                                              |                                                                                   | 0.20                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h                                               | 139                                                                               | 0                                                                                 | 0                                                                                 | 1376                                                                              | 280                                                                               | 1544                                                                              |   |      |
| V/C Ratio(X)                                                         | 0.78                                                                              | 0.00                                                                              | 0.00                                                                              | 0.84                                                                              | 0.05                                                                              | 0.20                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 348                                                                               | 0                                                                                 | 0                                                                                 | 1376                                                                              | 346                                                                               | 1544                                                                              |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 36.3                                                                              | 0.0                                                                               | 0.0                                                                               | 6.4                                                                               | 9.8                                                                               | 1.5                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 8.9                                                                               | 0.0                                                                               | 0.0                                                                               | 6.1                                                                               | 0.1                                                                               | 0.3                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.7                                                                               | 0.0                                                                               | 0.0                                                                               | 18.6                                                                              | 0.1                                                                               | 1.6                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 45.2                                                                              | 0.0                                                                               | 0.0                                                                               | 12.6                                                                              | 9.9                                                                               | 1.8                                                                               |   |      |
| LnGrp LOS                                                            | D                                                                                 |                                                                                   |                                                                                   | B                                                                                 | A                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h                                                  | 108                                                                               |                                                                                   | 1150                                                                              |                                                                                   |                                                                                   | 330                                                                               |   |      |
| Approach Delay, s/veh                                                | 45.2                                                                              |                                                                                   | 12.6                                                                              |                                                                                   |                                                                                   | 2.2                                                                               |   |      |
| Approach LOS                                                         | D                                                                                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 70.0                                                                              |                                                                                   |                                                                                   | 5.1                                                                               | 64.9                                                                              |   | 10.4 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 66.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 58.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                   | 2.1                                                                               | 35.6                                                                              |   | 6.9  |
| Green Ext Time (p_c), s                                              |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 0.0                                                                               | 12.1                                                                              |   | 0.2  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 12.6                                                                              |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 10: Brockett Rd & US 29/L"Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 77                                                                                | 1053                                                                              | 48                                                                                | 327                                                                               | 784                                                                               | 58                                                                                | 36                                                                                 | 84                                                                                  | 275                                                                                 | 136                                                                                 | 284                                                                                 | 172                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                  | 8                                                                                   | 18                                                                                  | 7                                                                                   | 4                                                                                   | 14                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                               | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                |
| Adj Flow Rate, veh/h         | 85                                                                                | 1157                                                                              | 53                                                                                | 355                                                                               | 852                                                                               | 63                                                                                | 41                                                                                 | 97                                                                                  | 316                                                                                 | 149                                                                                 | 312                                                                                 | 189                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.87                                                                               | 0.87                                                                                | 0.87                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 368                                                                               | 1345                                                                              | 62                                                                                | 395                                                                               | 1642                                                                              | 121                                                                               | 209                                                                                | 383                                                                                 | 326                                                                                 | 340                                                                                 | 422                                                                                 | 359                                                                                 |
| Arrive On Green              | 0.05                                                                              | 0.39                                                                              | 0.39                                                                              | 0.15                                                                              | 0.50                                                                              | 0.50                                                                              | 0.03                                                                               | 0.20                                                                                | 0.20                                                                                | 0.05                                                                                | 0.22                                                                                | 0.22                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3447                                                                              | 158                                                                               | 1757                                                                              | 3309                                                                              | 245                                                                               | 1792                                                                               | 1881                                                                                | 1599                                                                                | 1792                                                                                | 1881                                                                                | 1599                                                                                |
| Grp Volume(v), veh/h         | 85                                                                                | 594                                                                               | 616                                                                               | 355                                                                               | 451                                                                               | 464                                                                               | 41                                                                                 | 97                                                                                  | 316                                                                                 | 149                                                                                 | 312                                                                                 | 189                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1835                                                                              | 1757                                                                              | 1752                                                                              | 1801                                                                              | 1792                                                                               | 1881                                                                                | 1599                                                                                | 1792                                                                                | 1881                                                                                | 1599                                                                                |
| Q Serve(g_s), s              | 2.2                                                                               | 24.2                                                                              | 24.2                                                                              | 9.7                                                                               | 13.7                                                                              | 13.7                                                                              | 1.4                                                                                | 3.4                                                                                 | 15.4                                                                                | 4.0                                                                                 | 12.1                                                                                | 8.2                                                                                 |
| Cycle Q Clear(g_c), s        | 2.2                                                                               | 24.2                                                                              | 24.2                                                                              | 9.7                                                                               | 13.7                                                                              | 13.7                                                                              | 1.4                                                                                | 3.4                                                                                 | 15.4                                                                                | 4.0                                                                                 | 12.1                                                                                | 8.2                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.09                                                                              | 1.00                                                                              |                                                                                   | 0.14                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 368                                                                               | 690                                                                               | 716                                                                               | 395                                                                               | 870                                                                               | 894                                                                               | 209                                                                                | 383                                                                                 | 326                                                                                 | 340                                                                                 | 422                                                                                 | 359                                                                                 |
| V/C Ratio(X)                 | 0.23                                                                              | 0.86                                                                              | 0.86                                                                              | 0.90                                                                              | 0.52                                                                              | 0.52                                                                              | 0.20                                                                               | 0.25                                                                                | 0.97                                                                                | 0.44                                                                                | 0.74                                                                                | 0.53                                                                                |
| Avail Cap(c_a), veh/h        | 400                                                                               | 690                                                                               | 716                                                                               | 442                                                                               | 870                                                                               | 894                                                                               | 246                                                                                | 383                                                                                 | 326                                                                                 | 340                                                                                 | 422                                                                                 | 359                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 13.4                                                                              | 22.0                                                                              | 22.0                                                                              | 17.9                                                                              | 13.4                                                                              | 13.4                                                                              | 24.3                                                                               | 26.3                                                                                | 31.1                                                                                | 24.8                                                                                | 28.3                                                                                | 26.8                                                                                |
| Incr Delay (d2), s/veh       | 0.3                                                                               | 13.2                                                                              | 12.9                                                                              | 19.4                                                                              | 2.2                                                                               | 2.1                                                                               | 0.5                                                                                | 1.6                                                                                 | 43.0                                                                                | 0.9                                                                                 | 11.0                                                                                | 5.4                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.1                                                                               | 14.3                                                                              | 14.7                                                                              | 9.6                                                                               | 7.1                                                                               | 7.2                                                                               | 0.7                                                                                | 1.9                                                                                 | 10.7                                                                                | 0.9                                                                                 | 7.5                                                                                 | 4.2                                                                                 |
| LnGrp Delay(d),s/veh         | 13.7                                                                              | 35.2                                                                              | 34.9                                                                              | 37.4                                                                              | 15.6                                                                              | 15.6                                                                              | 24.8                                                                               | 27.9                                                                                | 74.0                                                                                | 25.7                                                                                | 39.4                                                                                | 32.2                                                                                |
| LnGrp LOS                    | B                                                                                 | D                                                                                 | C                                                                                 | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                  | C                                                                                   | E                                                                                   | C                                                                                   | D                                                                                   | C                                                                                   |
| Approach Vol, veh/h          | 1295                                                                              |                                                                                   |                                                                                   |                                                                                   | 1270                                                                              |                                                                                   |                                                                                    |                                                                                     | 454                                                                                 |                                                                                     | 650                                                                                 |                                                                                     |
| Approach Delay, s/veh        | 33.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 21.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 59.7                                                                                |                                                                                     | 34.2                                                                                |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | E                                                                                   |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 15.9                                                                              | 34.7                                                                              | 6.4                                                                               | 21.6                                                                              | 7.6                                                                               | 43.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 14.0                                                                              | 30.0                                                                              | 4.0                                                                               | 16.0                                                                              | 5.0                                                                               | 39.0                                                                              | 4.0                                                                                | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 11.7                                                                              | 26.2                                                                              | 3.4                                                                               | 14.1                                                                              | 4.2                                                                               | 15.7                                                                              | 6.0                                                                                | 17.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.3                                                                               | 3.2                                                                               | 0.0                                                                               | 0.9                                                                               | 0.0                                                                               | 14.3                                                                              | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 32.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 11: Idlewood Rd/Main St & US 29/L'Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |   |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 66                                                                                | 1061                                                                              | 141                                                                               | 178                                                                               | 843                                                                               | 71                                                                                | 64                                                                                  | 105                                                                                 | 172                                                                                 | 144                                                                                 | 245                                                                                 | 131                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                   | 8                                                                                   | 18                                                                                  | 7                                                                                   | 4                                                                                   | 14                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                                | 1881                                                                                | 1900                                                                                | 1863                                                                                | 1863                                                                                | 1863                                                                                |
| Adj Flow Rate, veh/h         | 77                                                                                | 1234                                                                              | 164                                                                               | 207                                                                               | 980                                                                               | 83                                                                                | 77                                                                                  | 127                                                                                 | 207                                                                                 | 157                                                                                 | 266                                                                                 | 142                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 320                                                                               | 1461                                                                              | 193                                                                               | 280                                                                               | 1657                                                                              | 140                                                                               | 246                                                                                 | 130                                                                                 | 211                                                                                 | 185                                                                                 | 378                                                                                 | 322                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.46                                                                              | 0.46                                                                              | 0.08                                                                              | 0.51                                                                              | 0.51                                                                              | 0.05                                                                                | 0.20                                                                                | 0.20                                                                                | 0.05                                                                                | 0.20                                                                                | 0.20                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3143                                                                              | 416                                                                               | 1757                                                                              | 3271                                                                              | 277                                                                               | 1792                                                                                | 645                                                                                 | 1051                                                                                | 1774                                                                                | 1863                                                                                | 1583                                                                                |
| Grp Volume(v), veh/h         | 77                                                                                | 692                                                                               | 706                                                                               | 207                                                                               | 525                                                                               | 538                                                                               | 77                                                                                  | 0                                                                                   | 334                                                                                 | 157                                                                                 | 266                                                                                 | 142                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1789                                                                              | 1757                                                                              | 1752                                                                              | 1796                                                                              | 1792                                                                                | 0                                                                                   | 1696                                                                                | 1774                                                                                | 1863                                                                                | 1583                                                                                |
| Q Serve(g_s), s              | 1.8                                                                               | 27.4                                                                              | 27.7                                                                              | 4.6                                                                               | 16.8                                                                              | 16.8                                                                              | 2.7                                                                                 | 0.0                                                                                 | 15.6                                                                                | 4.0                                                                                 | 10.6                                                                                | 6.2                                                                                 |
| Cycle Q Clear(g_c), s        | 1.8                                                                               | 27.4                                                                              | 27.7                                                                              | 4.6                                                                               | 16.8                                                                              | 16.8                                                                              | 2.7                                                                                 | 0.0                                                                                 | 15.6                                                                                | 4.0                                                                                 | 10.6                                                                                | 6.2                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.23                                                                              | 1.00                                                                              |                                                                                   | 0.15                                                                              | 1.00                                                                                |                                                                                     | 0.62                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 320                                                                               | 823                                                                               | 832                                                                               | 280                                                                               | 888                                                                               | 910                                                                               | 246                                                                                 | 0                                                                                   | 341                                                                                 | 185                                                                                 | 378                                                                                 | 322                                                                                 |
| V/C Ratio(X)                 | 0.24                                                                              | 0.84                                                                              | 0.85                                                                              | 0.74                                                                              | 0.59                                                                              | 0.59                                                                              | 0.31                                                                                | 0.00                                                                                | 0.98                                                                                | 0.85                                                                                | 0.70                                                                                | 0.44                                                                                |
| Avail Cap(c_a), veh/h        | 380                                                                               | 823                                                                               | 832                                                                               | 289                                                                               | 888                                                                               | 910                                                                               | 250                                                                                 | 0                                                                                   | 341                                                                                 | 185                                                                                 | 378                                                                                 | 322                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 11.5                                                                              | 18.7                                                                              | 18.8                                                                              | 16.8                                                                              | 13.8                                                                              | 13.8                                                                              | 24.2                                                                                | 0.0                                                                                 | 31.6                                                                                | 29.6                                                                                | 29.5                                                                                | 27.8                                                                                |
| Incr Delay (d2), s/veh       | 0.4                                                                               | 10.2                                                                              | 10.5                                                                              | 9.3                                                                               | 1.0                                                                               | 1.0                                                                               | 0.7                                                                                 | 0.0                                                                                 | 43.1                                                                                | 29.2                                                                                | 5.8                                                                                 | 1.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.9                                                                               | 15.6                                                                              | 15.9                                                                              | 2.9                                                                               | 8.3                                                                               | 8.5                                                                               | 1.4                                                                                 | 0.0                                                                                 | 11.3                                                                                | 3.0                                                                                 | 6.0                                                                                 | 2.8                                                                                 |
| LnGrp Delay(d),s/veh         | 11.9                                                                              | 28.9                                                                              | 29.3                                                                              | 26.1                                                                              | 14.9                                                                              | 14.9                                                                              | 24.9                                                                                | 0.0                                                                                 | 74.8                                                                                | 58.8                                                                                | 35.2                                                                                | 28.7                                                                                |
| LnGrp LOS                    | B                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | B                                                                                 | B                                                                                 | C                                                                                   |                                                                                     | E                                                                                   | E                                                                                   | D                                                                                   | C                                                                                   |
| Approach Vol, veh/h          | 1475                                                                              |                                                                                   |                                                                                   |                                                                                   | 1270                                                                              |                                                                                   |                                                                                     |                                                                                     | 411                                                                                 |                                                                                     | 565                                                                                 |                                                                                     |
| Approach Delay, s/veh        | 28.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 16.7                                                                              |                                                                                   |                                                                                     |                                                                                     | 65.4                                                                                |                                                                                     | 40.1                                                                                |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 10.6                                                                              | 41.0                                                                              | 7.8                                                                               | 20.2                                                                              | 7.3                                                                               | 44.3                                                                              | 8.0                                                                                 | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 7.0                                                                               | 37.0                                                                              | 4.0                                                                               | 16.0                                                                              | 6.0                                                                               | 38.0                                                                              | 4.0                                                                                 | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 6.6                                                                               | 29.7                                                                              | 4.7                                                                               | 12.6                                                                              | 3.8                                                                               | 18.8                                                                              | 6.0                                                                                 | 17.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 6.3                                                                               | 0.0                                                                               | 1.4                                                                               | 0.0                                                                               | 14.5                                                                              | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 30.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 12: SR 236/Hugh Howell Rd & Silver Hill Rd

6/21/2016

|                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |     |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----|------|
|                              |  |  |  |  |  |  |     |      |
| Movement                     | WBL                                                                               | WBR                                                                               | SEL                                                                               | SET                                                                               | NWT                                                                               | NWR                                                                               |     |      |
| Lane Configurations          |  |  |  |  |  |  |     |      |
| Volume (veh/h)               | 18                                                                                | 49                                                                                | 98                                                                                | 760                                                                               | 240                                                                               | 35                                                                                |     |      |
| Number                       | 1                                                                                 | 16                                                                                | 7                                                                                 | 4                                                                                 | 8                                                                                 | 18                                                                                |     |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |     |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |     |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |     |      |
| Adj Sat Flow, veh/h/ln       | 1845                                                                              | 1845                                                                              | 1881                                                                              | 1881                                                                              | 1881                                                                              | 1900                                                                              |     |      |
| Adj Flow Rate, veh/h         | 29                                                                                | 0                                                                                 | 107                                                                               | 826                                                                               | 273                                                                               | 40                                                                                |     |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 |     |      |
| Peak Hour Factor             | 0.63                                                                              | 0.63                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                              | 0.88                                                                              |     |      |
| Percent Heavy Veh, %         | 3                                                                                 | 3                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |     |      |
| Cap, veh/h                   | 47                                                                                | 42                                                                                | 887                                                                               | 1498                                                                              | 1031                                                                              | 151                                                                               |     |      |
| Arrive On Green              | 0.03                                                                              | 0.00                                                                              | 0.07                                                                              | 0.80                                                                              | 0.64                                                                              | 0.64                                                                              |     |      |
| Sat Flow, veh/h              | 1757                                                                              | 1568                                                                              | 1792                                                                              | 1881                                                                              | 1605                                                                              | 235                                                                               |     |      |
| Grp Volume(v), veh/h         | 29                                                                                | 0                                                                                 | 107                                                                               | 826                                                                               | 0                                                                                 | 313                                                                               |     |      |
| Grp Sat Flow(s),veh/h/ln     | 1757                                                                              | 1568                                                                              | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1840                                                                              |     |      |
| Q Serve(g_s), s              | 0.7                                                                               | 0.0                                                                               | 0.7                                                                               | 7.2                                                                               | 0.0                                                                               | 3.3                                                                               |     |      |
| Cycle Q Clear(g_c), s        | 0.7                                                                               | 0.0                                                                               | 0.7                                                                               | 7.2                                                                               | 0.0                                                                               | 3.3                                                                               |     |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 0.13                                                                              |     |      |
| Lane Grp Cap(c), veh/h       | 47                                                                                | 42                                                                                | 887                                                                               | 1498                                                                              | 0                                                                                 | 1182                                                                              |     |      |
| V/C Ratio(X)                 | 0.61                                                                              | 0.00                                                                              | 0.12                                                                              | 0.55                                                                              | 0.00                                                                              | 0.26                                                                              |     |      |
| Avail Cap(c_a), veh/h        | 622                                                                               | 555                                                                               | 928                                                                               | 1498                                                                              | 0                                                                                 | 1182                                                                              |     |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |     |      |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              |     |      |
| Uniform Delay (d), s/veh     | 21.8                                                                              | 0.0                                                                               | 1.8                                                                               | 1.7                                                                               | 0.0                                                                               | 3.5                                                                               |     |      |
| Incr Delay (d2), s/veh       | 12.1                                                                              | 0.0                                                                               | 0.1                                                                               | 1.5                                                                               | 0.0                                                                               | 0.5                                                                               |     |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |     |      |
| %ile BackOfQ(50%),veh/ln     | 0.5                                                                               | 0.0                                                                               | 0.3                                                                               | 4.1                                                                               | 0.0                                                                               | 1.8                                                                               |     |      |
| LnGrp Delay(d),s/veh         | 33.8                                                                              | 0.0                                                                               | 1.9                                                                               | 3.1                                                                               | 0.0                                                                               | 4.0                                                                               |     |      |
| LnGrp LOS                    | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 |     |      |
| Approach Vol, veh/h          | 29                                                                                |                                                                                   |                                                                                   | 933                                                                               | 313                                                                               |                                                                                   |     |      |
| Approach Delay, s/veh        | 33.8                                                                              |                                                                                   |                                                                                   | 3.0                                                                               | 4.0                                                                               |                                                                                   |     |      |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |     |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7   | 8    |
| Assigned Phs                 |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 | 7   | 8    |
| Phs Duration (G+Y+Rc), s     |                                                                                   |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 5.2                                                                               | 7.0 | 33.0 |
| Change Period (Y+Rc), s      |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0 | 4.0  |
| Max Green Setting (Gmax), s  |                                                                                   |                                                                                   |                                                                                   | 36.0                                                                              |                                                                                   | 16.0                                                                              | 4.0 | 28.0 |
| Max Q Clear Time (g_c+l1), s |                                                                                   |                                                                                   |                                                                                   | 9.2                                                                               |                                                                                   | 2.7                                                                               | 2.7 | 5.3  |
| Green Ext Time (p_c), s      |                                                                                   |                                                                                   |                                                                                   | 8.2                                                                               |                                                                                   | 0.0                                                                               | 0.0 | 7.7  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |     |      |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   |     |      |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |     |      |

# HCM 2010 Signalized Intersection Summary

## 8: SR 236/Hugh Howell Rd & Rosser Rd

6/21/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR                                                                               | SWL                                                                               | SWR                                                                               |   |      |
| Lane Configurations                                                  |  |  |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 59                                                                                | 205                                                                               | 756                                                                               | 5                                                                                 | 7                                                                                 | 411                                                                               |   |      |
| Number                                                               | 5                                                                                 | 2                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                 | 18                                                                                |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1845                                                                              | 1845                                                                              | 1863                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 66                                                                                | 228                                                                               | 922                                                                               | 6                                                                                 | 8                                                                                 | 495                                                                               |   |      |
| Adj No. of Lanes                                                     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.90                                                                              | 0.90                                                                              | 0.82                                                                              | 0.82                                                                              | 0.83                                                                              | 0.83                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Cap, veh/h                                                           | 200                                                                               | 1153                                                                              | 1001                                                                              | 7                                                                                 | 7                                                                                 | 442                                                                               |   |      |
| Arrive On Green                                                      | 0.04                                                                              | 0.63                                                                              | 0.54                                                                              | 0.54                                                                              | 0.28                                                                              | 0.28                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1757                                                                              | 1845                                                                              | 1849                                                                              | 12                                                                                | 25                                                                                | 1574                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 66                                                                                | 228                                                                               | 0                                                                                 | 928                                                                               | 504                                                                               | 0                                                                                 |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1757                                                                              | 1845                                                                              | 0                                                                                 | 1861                                                                              | 1602                                                                              | 0                                                                                 |   |      |
| Q Serve(g_s), s                                                      | 1.3                                                                               | 4.5                                                                               | 0.0                                                                               | 39.0                                                                              | 24.0                                                                              | 0.0                                                                               |   |      |
| Cycle Q Clear(g_c), s                                                | 1.3                                                                               | 4.5                                                                               | 0.0                                                                               | 39.0                                                                              | 24.0                                                                              | 0.0                                                                               |   |      |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   |                                                                                   | 0.01                                                                              | 0.02                                                                              | 0.98                                                                              |   |      |
| Lane Grp Cap(c), veh/h                                               | 200                                                                               | 1153                                                                              | 0                                                                                 | 1007                                                                              | 450                                                                               | 0                                                                                 |   |      |
| V/C Ratio(X)                                                         | 0.33                                                                              | 0.20                                                                              | 0.00                                                                              | 0.92                                                                              | 1.12                                                                              | 0.00                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 217                                                                               | 1253                                                                              | 0                                                                                 | 1090                                                                              | 450                                                                               | 0                                                                                 |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 18.1                                                                              | 6.8                                                                               | 0.0                                                                               | 17.9                                                                              | 30.7                                                                              | 0.0                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 1.0                                                                               | 0.1                                                                               | 0.0                                                                               | 12.0                                                                              | 79.0                                                                              | 0.0                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 0.9                                                                               | 2.3                                                                               | 0.0                                                                               | 23.2                                                                              | 20.4                                                                              | 0.0                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 19.1                                                                              | 6.9                                                                               | 0.0                                                                               | 29.9                                                                              | 109.7                                                                             | 0.0                                                                               |   |      |
| LnGrp LOS                                                            | B                                                                                 | A                                                                                 |                                                                                   | C                                                                                 | F                                                                                 |                                                                                   |   |      |
| Approach Vol, veh/h                                                  |                                                                                   | 294                                                                               | 928                                                                               |                                                                                   | 504                                                                               |                                                                                   |   |      |
| Approach Delay, s/veh                                                |                                                                                   | 9.6                                                                               | 29.9                                                                              |                                                                                   | 109.7                                                                             |                                                                                   |   |      |
| Approach LOS                                                         |                                                                                   | A                                                                                 | C                                                                                 |                                                                                   | F                                                                                 |                                                                                   |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 57.4                                                                              |                                                                                   |                                                                                   | 7.2                                                                               | 50.2                                                                              |   | 28.0 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 58.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 50.0                                                                              |   | 24.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 6.5                                                                               |                                                                                   |                                                                                   | 3.3                                                                               | 41.0                                                                              |   | 26.0 |
| Green Ext Time (p_c), s                                              |                                                                                   | 11.9                                                                              |                                                                                   |                                                                                   | 0.0                                                                               | 5.2                                                                               |   | 0.0  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 49.8                                                                              |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 8: SR 236/Hugh Howell Rd & Rosser Rd

6/21/2016

|                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
|                                                                      |  |  |  |  |  |  |   |      |
| Movement                                                             | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR                                                                               | SWL                                                                               | SWR                                                                               |   |      |
| Lane Configurations                                                  |  |  |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 367                                                                               | 871                                                                               | 279                                                                               | 5                                                                                 | 4                                                                                 | 142                                                                               |   |      |
| Number                                                               | 5                                                                                 | 2                                                                                 | 6                                                                                 | 16                                                                                | 3                                                                                 | 18                                                                                |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1881                                                                              | 1881                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 399                                                                               | 947                                                                               | 328                                                                               | 6                                                                                 | 4                                                                                 | 156                                                                               |   |      |
| Adj No. of Lanes                                                     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.92                                                                              | 0.92                                                                              | 0.85                                                                              | 0.85                                                                              | 0.91                                                                              | 0.91                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Cap, veh/h                                                           | 737                                                                               | 1208                                                                              | 644                                                                               | 12                                                                                | 6                                                                                 | 239                                                                               |   |      |
| Arrive On Green                                                      | 0.18                                                                              | 0.64                                                                              | 0.36                                                                              | 0.36                                                                              | 0.15                                                                              | 0.15                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1792                                                                              | 1881                                                                              | 1806                                                                              | 33                                                                                | 40                                                                                | 1555                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 399                                                                               | 947                                                                               | 0                                                                                 | 334                                                                               | 161                                                                               | 0                                                                                 |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1839                                                                              | 1605                                                                              | 0                                                                                 |   |      |
| Q Serve(g_s), s                                                      | 4.6                                                                               | 14.2                                                                              | 0.0                                                                               | 5.6                                                                               | 3.7                                                                               | 0.0                                                                               |   |      |
| Cycle Q Clear(g_c), s                                                | 4.6                                                                               | 14.2                                                                              | 0.0                                                                               | 5.6                                                                               | 3.7                                                                               | 0.0                                                                               |   |      |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                              | 0.02                                                                              | 0.97                                                                              |   |      |
| Lane Grp Cap(c), veh/h                                               | 737                                                                               | 1208                                                                              | 0                                                                                 | 656                                                                               | 247                                                                               | 0                                                                                 |   |      |
| V/C Ratio(X)                                                         | 0.54                                                                              | 0.78                                                                              | 0.00                                                                              | 0.51                                                                              | 0.65                                                                              | 0.00                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 1003                                                                              | 1728                                                                              | 0                                                                                 | 892                                                                               | 655                                                                               | 0                                                                                 |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 5.4                                                                               | 5.1                                                                               | 0.0                                                                               | 9.9                                                                               | 15.6                                                                              | 0.0                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 0.6                                                                               | 1.6                                                                               | 0.0                                                                               | 0.6                                                                               | 2.9                                                                               | 0.0                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.2                                                                               | 7.6                                                                               | 0.0                                                                               | 2.9                                                                               | 1.8                                                                               | 0.0                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 6.0                                                                               | 6.6                                                                               | 0.0                                                                               | 10.5                                                                              | 18.5                                                                              | 0.0                                                                               |   |      |
| LnGrp LOS                                                            | A                                                                                 | A                                                                                 |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   |   |      |
| Approach Vol, veh/h                                                  |                                                                                   | 1346                                                                              | 334                                                                               |                                                                                   | 161                                                                               |                                                                                   |   |      |
| Approach Delay, s/veh                                                |                                                                                   | 6.4                                                                               | 10.5                                                                              |                                                                                   | 18.5                                                                              |                                                                                   |   |      |
| Approach LOS                                                         |                                                                                   | A                                                                                 | B                                                                                 |                                                                                   | B                                                                                 |                                                                                   |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 29.2                                                                              |                                                                                   |                                                                                   | 11.2                                                                              | 18.0                                                                              |   | 10.0 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 36.0                                                                              |                                                                                   |                                                                                   | 13.0                                                                              | 19.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 16.2                                                                              |                                                                                   |                                                                                   | 6.6                                                                               | 7.6                                                                               |   | 5.7  |
| Green Ext Time (p_c), s                                              |                                                                                   | 8.9                                                                               |                                                                                   |                                                                                   | 0.7                                                                               | 6.4                                                                               |   | 0.3  |
| Intersection Summary                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 8.2                                                                               |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| Notes                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 1: Mtn Indus Blvd & US 78 WB Off Ramp/US 78 WB On Ramp

6/21/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |  |  |  |                                                                                     |
| Volume (veh/h)                                                       | 454                                                                               | 0                                                                                 | 420                                                                               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1409                                                                                | 64                                                                                  | 113                                                                                 | 733                                                                                 | 0                                                                                   |
| Number                                                               | 7                                                                                 | 4                                                                                 | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1776                                                                              | 1776                                                                              | 1776                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1810                                                                                | 1810                                                                                | 1776                                                                                | 1776                                                                                | 0                                                                                   |
| Adj Flow Rate, veh/h                                                 | 508                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1577                                                                                | 0                                                                                   | 127                                                                                 | 821                                                                                 | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 3                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor                                                     | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                                 | 7                                                                                 | 7                                                                                 | 7                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5                                                                                   | 5                                                                                   | 7                                                                                   | 7                                                                                   | 0                                                                                   |
| Cap, veh/h                                                           | 670                                                                               | 0                                                                                 | 299                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2576                                                                                | 802                                                                                 | 328                                                                                 | 2215                                                                                | 0                                                                                   |
| Arrive On Green                                                      | 0.20                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.52                                                                                | 0.00                                                                                | 0.12                                                                                | 1.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3382                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5103                                                                                | 1538                                                                                | 1691                                                                                | 3463                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h                                                 | 508                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1577                                                                                | 0                                                                                   | 127                                                                                 | 821                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1691                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1647                                                                                | 1538                                                                                | 1691                                                                                | 1687                                                                                | 0                                                                                   |
| Q Serve(g_s), s                                                      | 7.8                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.3                                                                                | 0.0                                                                                 | 1.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 7.8                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.3                                                                                | 0.0                                                                                 | 1.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 670                                                                               | 0                                                                                 | 299                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2576                                                                                | 802                                                                                 | 328                                                                                 | 2215                                                                                | 0                                                                                   |
| V/C Ratio(X)                                                         | 0.76                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.61                                                                                | 0.00                                                                                | 0.39                                                                                | 0.37                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 984                                                                               | 0                                                                                 | 439                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2576                                                                                | 802                                                                                 | 346                                                                                 | 2215                                                                                | 0                                                                                   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 2.00                                                                                | 2.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 1.00                                                                                | 0.00                                                                                | 0.46                                                                                | 0.46                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 20.8                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 9.2                                                                                 | 0.0                                                                                 | 6.8                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 2.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 1.1                                                                                 | 0.0                                                                                 | 0.3                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 3.8                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 5.8                                                                                 | 0.0                                                                                 | 0.8                                                                                 | 0.1                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 22.8                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 10.3                                                                                | 0.0                                                                                 | 7.2                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 508                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1577                                                                                |                                                                                     |                                                                                     | 948                                                                                 |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 22.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10.3                                                                                |                                                                                     |                                                                                     | 1.2                                                                                 |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             | 7.4                                                                               | 32.7                                                                              |                                                                                   | 14.9                                                                              |                                                                                   | 40.1                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          | 4.0                                                                               | 23.0                                                                              |                                                                                   | 16.0                                                                              |                                                                                   | 31.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         | 3.7                                                                               | 14.3                                                                              |                                                                                   | 9.8                                                                               |                                                                                   | 2.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              | 0.0                                                                               | 7.5                                                                               |                                                                                   | 1.1                                                                               |                                                                                   | 20.1                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 9.6                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/21/2016

|                              |  |      |     |                                                                                   |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
|------------------------------|------------------------------------------------------------------------------------|------|-----|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                                | EBT  | EBR | WBL                                                                               | WBT   | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR  | SBL  | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                    |      |     |  |       |  |  |  |      |      |  |  |
| Volume (veh/h)               | 0                                                                                  | 0    | 0   | 103                                                                               | 0     | 520                                                                               | 341                                                                                 | 1663                                                                                | 0    | 0    | 710                                                                                 | 671                                                                                 |
| Number                       |                                                                                    |      |     | 3                                                                                 | 8     | 18                                                                                | 5                                                                                   | 2                                                                                   | 12   | 1    | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          |                                                                                    |      |     | 0                                                                                 | 0     | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0    | 0    | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          |                                                                                    |      |     | 1.00                                                                              |       | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00 | 1.00 |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             |                                                                                    |      |     | 1.00                                                                              | 1.00  | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       |                                                                                    |      |     | 1937                                                                              | 0     | 1863                                                                              | 1792                                                                                | 1792                                                                                | 0    | 0    | 1776                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         |                                                                                    |      |     | 115                                                                               | 0     | 582                                                                               | 382                                                                                 | 1862                                                                                | 0    | 0    | 795                                                                                 | 0                                                                                   |
| Adj No. of Lanes             |                                                                                    |      |     | 1                                                                                 | 0     | 1                                                                                 | 1                                                                                   | 2                                                                                   | 0    | 0    | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor             |                                                                                    |      |     | 0.92                                                                              | 0.92  | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92 | 0.92 | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         |                                                                                    |      |     | 2                                                                                 | 0     | 2                                                                                 | 6                                                                                   | 6                                                                                   | 0    | 0    | 7                                                                                   | 7                                                                                   |
| Cap, veh/h                   |                                                                                    |      |     | 537                                                                               | 0     | 461                                                                               | 538                                                                                 | 1920                                                                                | 0    | 0    | 1587                                                                                | 0                                                                                   |
| Arrive On Green              |                                                                                    |      |     | 0.29                                                                              | 0.00  | 0.29                                                                              | 0.16                                                                                | 0.56                                                                                | 0.00 | 0.00 | 0.33                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              |                                                                                    |      |     | 1845                                                                              | 0     | 1583                                                                              | 1707                                                                                | 3495                                                                                | 0    | 0    | 5167                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         |                                                                                    |      |     | 115                                                                               | 0     | 582                                                                               | 382                                                                                 | 1862                                                                                | 0    | 0    | 795                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     |                                                                                    |      |     | 1845                                                                              | 0     | 1583                                                                              | 1707                                                                                | 1703                                                                                | 0    | 0    | 1616                                                                                | 0                                                                                   |
| Q Serve(g_s), s              |                                                                                    |      |     | 2.6                                                                               | 0.0   | 16.0                                                                              | 7.5                                                                                 | 28.9                                                                                | 0.0  | 0.0  | 7.3                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        |                                                                                    |      |     | 2.6                                                                               | 0.0   | 16.0                                                                              | 7.5                                                                                 | 28.9                                                                                | 0.0  | 0.0  | 7.3                                                                                 | 0.0                                                                                 |
| Prop In Lane                 |                                                                                    |      |     | 1.00                                                                              |       | 1.00                                                                              | 1.00                                                                                |                                                                                     | 0.00 | 0.00 |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       |                                                                                    |      |     | 537                                                                               | 0     | 461                                                                               | 538                                                                                 | 1920                                                                                | 0    | 0    | 1587                                                                                | 0                                                                                   |
| V/C Ratio(X)                 |                                                                                    |      |     | 0.21                                                                              | 0.00  | 1.26                                                                              | 0.71                                                                                | 0.97                                                                                | 0.00 | 0.00 | 0.50                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        |                                                                                    |      |     | 537                                                                               | 0     | 461                                                                               | 538                                                                                 | 1920                                                                                | 0    | 0    | 1587                                                                                | 0                                                                                   |
| HCM Platoon Ratio            |                                                                                    |      |     | 1.00                                                                              | 1.00  | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           |                                                                                    |      |     | 1.00                                                                              | 0.00  | 1.00                                                                              | 0.63                                                                                | 0.63                                                                                | 0.00 | 0.00 | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     |                                                                                    |      |     | 14.7                                                                              | 0.0   | 19.5                                                                              | 9.8                                                                                 | 11.6                                                                                | 0.0  | 0.0  | 14.9                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       |                                                                                    |      |     | 0.2                                                                               | 0.0   | 135.1                                                                             | 2.7                                                                                 | 10.6                                                                                | 0.0  | 0.0  | 1.1                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    |                                                                                    |      |     | 0.0                                                                               | 0.0   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0  | 0.0  | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     |                                                                                    |      |     | 1.3                                                                               | 0.0   | 24.2                                                                              | 3.8                                                                                 | 16.0                                                                                | 0.0  | 0.0  | 3.4                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         |                                                                                    |      |     | 14.9                                                                              | 0.0   | 154.6                                                                             | 12.5                                                                                | 22.2                                                                                | 0.0  | 0.0  | 16.0                                                                                | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                    |      |     | B                                                                                 |       | F                                                                                 | B                                                                                   | C                                                                                   |      |      | B                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                    |      |     |                                                                                   | 697   |                                                                                   |                                                                                     | 2244                                                                                |      |      | 795                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                    |      |     |                                                                                   | 131.5 |                                                                                   |                                                                                     | 20.5                                                                                |      |      | 16.0                                                                                |                                                                                     |
| Approach LOS                 |                                                                                    |      |     |                                                                                   | F     |                                                                                   |                                                                                     | C                                                                                   |      |      | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                  | 2    | 3   | 4                                                                                 | 5     | 6                                                                                 | 7                                                                                   | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                    | 2    |     |                                                                                   | 5     | 6                                                                                 |                                                                                     | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                    | 35.0 |     |                                                                                   | 13.0  | 22.0                                                                              |                                                                                     | 20.0                                                                                |      |      |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                    | 4.0  |     |                                                                                   | 4.0   | 4.0                                                                               |                                                                                     | 4.0                                                                                 |      |      |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                    | 31.0 |     |                                                                                   | 9.0   | 18.0                                                                              |                                                                                     | 16.0                                                                                |      |      |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s |                                                                                    | 30.9 |     |                                                                                   | 9.5   | 9.3                                                                               |                                                                                     | 18.0                                                                                |      |      |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                    | 0.0  |     |                                                                                   | 0.0   | 8.0                                                                               |                                                                                     | 0.0                                                                                 |      |      |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                    |      |     |                                                                                   |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                    |      |     | 40.3                                                                              |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                    |      |     | D                                                                                 |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 48                                                                                | 194                                                                               | 137                                                                               | 151                                                                               | 897                                                                               | 136                                                                               | 323                                                                                | 1027                                                                                | 40                                                                                  | 84                                                                                  | 900                                                                                 | 47                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1810                                                                               | 1810                                                                                | 1900                                                                                | 1792                                                                                | 1792                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 54                                                                                | 217                                                                               | 153                                                                               | 169                                                                               | 1004                                                                              | 152                                                                               | 366                                                                                | 1162                                                                                | 45                                                                                  | 94                                                                                  | 1008                                                                                | 53                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 130                                                                               | 505                                                                               | 340                                                                               | 389                                                                               | 962                                                                               | 146                                                                               | 379                                                                                | 1488                                                                                | 58                                                                                  | 227                                                                                 | 1060                                                                                | 56                                                                                  |
| Arrive On Green              | 0.03                                                                              | 0.26                                                                              | 0.26                                                                              | 0.09                                                                              | 0.31                                                                              | 0.31                                                                              | 0.17                                                                               | 0.44                                                                                | 0.44                                                                                | 0.05                                                                                | 0.32                                                                                | 0.32                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 1949                                                                              | 1314                                                                              | 1774                                                                              | 3084                                                                              | 466                                                                               | 1723                                                                               | 3375                                                                                | 131                                                                                 | 1707                                                                                | 3292                                                                                | 173                                                                                 |
| Grp Volume(v), veh/h         | 54                                                                                | 188                                                                               | 182                                                                               | 169                                                                               | 576                                                                               | 580                                                                               | 366                                                                                | 592                                                                                 | 615                                                                                 | 94                                                                                  | 521                                                                                 | 540                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1560                                                                              | 1774                                                                              | 1770                                                                              | 1780                                                                              | 1723                                                                               | 1719                                                                                | 1786                                                                                | 1707                                                                                | 1703                                                                                | 1762                                                                                |
| Q Serve(g_s), s              | 2.3                                                                               | 9.2                                                                               | 9.7                                                                               | 6.6                                                                               | 31.0                                                                              | 31.0                                                                              | 16.0                                                                               | 29.1                                                                                | 29.2                                                                                | 3.6                                                                                 | 29.7                                                                                | 29.7                                                                                |
| Cycle Q Clear(g_c), s        | 2.3                                                                               | 9.2                                                                               | 9.7                                                                               | 6.6                                                                               | 31.0                                                                              | 31.0                                                                              | 16.0                                                                               | 29.1                                                                                | 29.2                                                                                | 3.6                                                                                 | 29.7                                                                                | 29.7                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.84                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                              | 1.00                                                                               |                                                                                     | 0.07                                                                                | 1.00                                                                                |                                                                                     | 0.10                                                                                |
| Lane Grp Cap(c), veh/h       | 130                                                                               | 441                                                                               | 404                                                                               | 389                                                                               | 552                                                                               | 556                                                                               | 379                                                                                | 758                                                                                 | 788                                                                                 | 227                                                                                 | 549                                                                                 | 568                                                                                 |
| V/C Ratio(X)                 | 0.42                                                                              | 0.43                                                                              | 0.45                                                                              | 0.43                                                                              | 1.04                                                                              | 1.04                                                                              | 0.97                                                                               | 0.78                                                                                | 0.78                                                                                | 0.41                                                                                | 0.95                                                                                | 0.95                                                                                |
| Avail Cap(c_a), veh/h        | 141                                                                               | 441                                                                               | 404                                                                               | 414                                                                               | 552                                                                               | 556                                                                               | 379                                                                                | 758                                                                                 | 788                                                                                 | 241                                                                                 | 549                                                                                 | 568                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 29.0                                                                              | 30.7                                                                              | 30.9                                                                              | 22.9                                                                              | 34.2                                                                              | 34.2                                                                              | 27.7                                                                               | 23.7                                                                                | 23.7                                                                                | 22.5                                                                                | 32.9                                                                                | 32.9                                                                                |
| Incr Delay (d2), s/veh       | 2.1                                                                               | 0.7                                                                               | 0.8                                                                               | 0.8                                                                               | 49.8                                                                              | 50.2                                                                              | 37.0                                                                               | 7.8                                                                                 | 7.6                                                                                 | 1.2                                                                                 | 27.9                                                                                | 27.4                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.2                                                                               | 4.4                                                                               | 4.3                                                                               | 3.3                                                                               | 22.7                                                                              | 22.9                                                                              | 13.9                                                                               | 15.5                                                                                | 16.0                                                                                | 1.7                                                                                 | 18.2                                                                                | 18.7                                                                                |
| LnGrp Delay(d),s/veh         | 31.1                                                                              | 31.3                                                                              | 31.7                                                                              | 23.7                                                                              | 84.0                                                                              | 84.4                                                                              | 64.7                                                                               | 31.5                                                                                | 31.3                                                                                | 23.7                                                                                | 60.8                                                                                | 60.2                                                                                |
| LnGrp LOS                    | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | F                                                                                 | F                                                                                 | E                                                                                  | C                                                                                   | C                                                                                   | C                                                                                   | E                                                                                   | E                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 424                                                                               |                                                                                   |                                                                                   | 1325                                                                              |                                                                                   |                                                                                    | 1573                                                                                |                                                                                     |                                                                                     | 1155                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                   | 76.5                                                                              |                                                                                   |                                                                                    | 39.1                                                                                |                                                                                     |                                                                                     | 57.5                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.2                                                                               | 47.8                                                                              | 12.6                                                                              | 29.7                                                                              | 21.0                                                                              | 36.0                                                                              | 7.3                                                                                | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 43.0                                                                              | 10.0                                                                              | 25.0                                                                              | 17.0                                                                              | 32.0                                                                              | 4.0                                                                                | 31.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 5.6                                                                               | 31.2                                                                              | 8.6                                                                               | 11.7                                                                              | 18.0                                                                              | 31.7                                                                              | 4.3                                                                                | 33.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 9.2                                                                               | 0.1                                                                               | 7.4                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 54.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 4: Mtn Indus. Blvd./Jimmy Carter Blvd & US 29/L'Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 120                                                                               | 357                                                                               | 19                                                                                | 591                                                                               | 1325                                                                              | 293                                                                               | 40                                                                                 | 609                                                                                 | 189                                                                                 | 127                                                                                 | 570                                                                                 | 228                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1827                                                                              | 1827                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1743                                                                               | 1743                                                                                | 1743                                                                                | 1776                                                                                | 1776                                                                                | 1776                                                                                |
| Adj Flow Rate, veh/h         | 139                                                                               | 413                                                                               | 22                                                                                | 662                                                                               | 1483                                                                              | 328                                                                               | 49                                                                                 | 747                                                                                 | 0                                                                                   | 142                                                                                 | 638                                                                                 | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                               | 0.84                                                                                | 0.84                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 9                                                                                  | 9                                                                                   | 9                                                                                   | 7                                                                                   | 7                                                                                   | 7                                                                                   |
| Cap, veh/h                   | 157                                                                               | 795                                                                               | 42                                                                                | 735                                                                               | 1431                                                                              | 308                                                                               | 211                                                                                | 773                                                                                 | 346                                                                                 | 181                                                                                 | 1125                                                                                | 503                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.24                                                                              | 0.24                                                                              | 0.30                                                                              | 0.49                                                                              | 0.49                                                                              | 0.23                                                                               | 0.23                                                                                | 0.00                                                                                | 0.06                                                                                | 0.33                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1740                                                                              | 3353                                                                              | 178                                                                               | 1792                                                                              | 2927                                                                              | 630                                                                               | 737                                                                                | 3312                                                                                | 1482                                                                                | 1691                                                                                | 3374                                                                                | 1509                                                                                |
| Grp Volume(v), veh/h         | 139                                                                               | 213                                                                               | 222                                                                               | 662                                                                               | 890                                                                               | 921                                                                               | 49                                                                                 | 747                                                                                 | 0                                                                                   | 142                                                                                 | 638                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1740                                                                              | 1736                                                                              | 1795                                                                              | 1792                                                                              | 1787                                                                              | 1770                                                                              | 737                                                                                | 1656                                                                                | 1482                                                                                | 1691                                                                                | 1687                                                                                | 1509                                                                                |
| Q Serve(g_s), s              | 4.0                                                                               | 9.6                                                                               | 9.7                                                                               | 23.4                                                                              | 44.0                                                                              | 44.0                                                                              | 5.3                                                                                | 20.1                                                                                | 0.0                                                                                 | 5.0                                                                                 | 14.0                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 4.0                                                                               | 9.6                                                                               | 9.7                                                                               | 23.4                                                                              | 44.0                                                                              | 44.0                                                                              | 10.3                                                                               | 20.1                                                                                | 0.0                                                                                 | 5.0                                                                                 | 14.0                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.10                                                                              | 1.00                                                                              |                                                                                   | 0.36                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 157                                                                               | 411                                                                               | 426                                                                               | 735                                                                               | 874                                                                               | 865                                                                               | 211                                                                                | 773                                                                                 | 346                                                                                 | 181                                                                                 | 1125                                                                                | 503                                                                                 |
| V/C Ratio(X)                 | 0.88                                                                              | 0.52                                                                              | 0.52                                                                              | 0.90                                                                              | 1.02                                                                              | 1.06                                                                              | 0.23                                                                               | 0.97                                                                                | 0.00                                                                                | 0.79                                                                                | 0.57                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 157                                                                               | 411                                                                               | 426                                                                               | 821                                                                               | 874                                                                               | 865                                                                               | 211                                                                                | 773                                                                                 | 346                                                                                 | 181                                                                                 | 1125                                                                                | 503                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 32.0                                                                              | 29.9                                                                              | 29.9                                                                              | 16.0                                                                              | 23.0                                                                              | 23.0                                                                              | 32.6                                                                               | 34.2                                                                                | 0.0                                                                                 | 28.1                                                                                | 24.7                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 40.2                                                                              | 1.1                                                                               | 1.1                                                                               | 12.1                                                                              | 35.1                                                                              | 49.4                                                                              | 2.6                                                                                | 25.2                                                                                | 0.0                                                                                 | 20.0                                                                                | 2.1                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 3.3                                                                               | 4.8                                                                               | 4.9                                                                               | 13.9                                                                              | 30.1                                                                              | 33.3                                                                              | 1.2                                                                                | 11.8                                                                                | 0.0                                                                                 | 2.2                                                                                 | 6.8                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 72.2                                                                              | 31.0                                                                              | 31.0                                                                              | 28.2                                                                              | 58.1                                                                              | 72.4                                                                              | 35.1                                                                               | 59.4                                                                                | 0.0                                                                                 | 48.2                                                                                | 26.7                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | E                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | F                                                                                 | F                                                                                 | D                                                                                  | E                                                                                   |                                                                                     | D                                                                                   | C                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 574                                                                               |                                                                                   |                                                                                   | 2473                                                                              |                                                                                   |                                                                                    | 796                                                                                 |                                                                                     |                                                                                     | 780                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 41.0                                                                              |                                                                                   |                                                                                   | 55.4                                                                              |                                                                                   |                                                                                    | 57.9                                                                                |                                                                                     |                                                                                     | 30.6                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 |                                                                                   | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 25.0                                                                              | 30.7                                                                              | 25.3                                                                              |                                                                                   | 34.0                                                                              | 8.0                                                                                | 48.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 21.0                                                                              | 31.0                                                                              | 17.0                                                                              |                                                                                   | 30.0                                                                              | 4.0                                                                                | 44.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 7.0                                                                               | 22.1                                                                              | 25.4                                                                              | 11.7                                                                              |                                                                                   | 16.0                                                                              | 6.0                                                                                | 46.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               | 1.2                                                                               | 4.7                                                                               |                                                                                   | 7.5                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 5: US 29/L'Ville Hwy & SR 236/ Hugh Howell Rd

6/21/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |                                                                                   |  |  |  |                                                                                    |  |                                                                                     |  |  |  |
| Volume (veh/h)                                                       | 314                                                                               | 198                                                                               | 7                                                                                 | 2                                                                                 | 653                                                                               | 916                                                                               | 7                                                                                  | 14                                                                                  | 7                                                                                   | 211                                                                                 | 8                                                                                   | 612                                                                                 |
| Number                                                               | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1845                                                                                | 1845                                                                                | 1845                                                                                |
| Adj Flow Rate, veh/h                                                 | 363                                                                               | 229                                                                               | 8                                                                                 | 2                                                                                 | 731                                                                               | 0                                                                                 | 8                                                                                  | 16                                                                                  | 8                                                                                   | 269                                                                                 | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Peak Hour Factor                                                     | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                |
| Percent Heavy Veh, %                                                 | 6                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                                                           | 589                                                                               | 1716                                                                              | 60                                                                                | 406                                                                               | 1013                                                                              | 453                                                                               | 79                                                                                 | 158                                                                                 | 79                                                                                  | 625                                                                                 | 0                                                                                   | 279                                                                                 |
| Arrive On Green                                                      | 0.18                                                                              | 0.51                                                                              | 0.51                                                                              | 0.29                                                                              | 0.29                                                                              | 0.00                                                                              | 0.18                                                                               | 0.18                                                                                | 0.18                                                                                | 0.18                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3312                                                                              | 3358                                                                              | 117                                                                               | 1127                                                                              | 3505                                                                              | 1568                                                                              | 445                                                                                | 890                                                                                 | 445                                                                                 | 3514                                                                                | 0                                                                                   | 1568                                                                                |
| Grp Volume(v), veh/h                                                 | 363                                                                               | 116                                                                               | 121                                                                               | 2                                                                                 | 731                                                                               | 0                                                                                 | 32                                                                                 | 0                                                                                   | 0                                                                                   | 269                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1656                                                                              | 1703                                                                              | 1772                                                                              | 1127                                                                              | 1752                                                                              | 1568                                                                              | 1780                                                                               | 0                                                                                   | 0                                                                                   | 1757                                                                                | 0                                                                                   | 1568                                                                                |
| Q Serve(g_s), s                                                      | 9.1                                                                               | 3.2                                                                               | 3.2                                                                               | 0.1                                                                               | 16.9                                                                              | 0.0                                                                               | 1.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 6.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 9.1                                                                               | 3.2                                                                               | 3.2                                                                               | 0.1                                                                               | 16.9                                                                              | 0.0                                                                               | 1.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 6.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 0.07                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.25                                                                               |                                                                                     | 0.25                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 589                                                                               | 870                                                                               | 906                                                                               | 406                                                                               | 1013                                                                              | 453                                                                               | 317                                                                                | 0                                                                                   | 0                                                                                   | 625                                                                                 | 0                                                                                   | 279                                                                                 |
| V/C Ratio(X)                                                         | 0.62                                                                              | 0.13                                                                              | 0.13                                                                              | 0.00                                                                              | 0.72                                                                              | 0.00                                                                              | 0.10                                                                               | 0.00                                                                                | 0.00                                                                                | 0.43                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 589                                                                               | 870                                                                               | 906                                                                               | 406                                                                               | 1013                                                                              | 453                                                                               | 317                                                                                | 0                                                                                   | 0                                                                                   | 625                                                                                 | 0                                                                                   | 279                                                                                 |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 34.2                                                                              | 11.5                                                                              | 11.5                                                                              | 22.8                                                                              | 28.8                                                                              | 0.0                                                                               | 31.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 32.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 4.8                                                                               | 0.3                                                                               | 0.3                                                                               | 0.0                                                                               | 4.5                                                                               | 0.0                                                                               | 0.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.2                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 4.5                                                                               | 1.6                                                                               | 1.7                                                                               | 0.0                                                                               | 8.7                                                                               | 0.0                                                                               | 0.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 3.2                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 39.0                                                                              | 11.9                                                                              | 11.9                                                                              | 22.8                                                                              | 33.2                                                                              | 0.0                                                                               | 31.6                                                                               | 0.0                                                                                 | 0.0                                                                                 | 35.1                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 600                                                                               |                                                                                   |                                                                                   | 733                                                                               |                                                                                   |                                                                                    | 32                                                                                  |                                                                                     |                                                                                     | 269                                                                                 |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 28.2                                                                              |                                                                                   |                                                                                   | 33.2                                                                              |                                                                                   |                                                                                    | 31.6                                                                                |                                                                                     |                                                                                     | 35.1                                                                                |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 50.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 30.0                                                                              |                                                                                    | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          |                                                                                   | 46.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              | 26.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         |                                                                                   | 5.2                                                                               |                                                                                   | 3.4                                                                               | 11.1                                                                              | 18.9                                                                              |                                                                                    | 8.1                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              |                                                                                   | 6.9                                                                               |                                                                                   | 0.1                                                                               | 0.6                                                                               | 3.3                                                                               |                                                                                    | 0.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 31.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection             |        |      |        |       |        |      |
|--------------------------|--------|------|--------|-------|--------|------|
| Int Delay, s/veh         | 1.5    |      |        |       |        |      |
| Movement                 | EBT    | EBR  | WBL    | WBT   | NBL    | NBR  |
| Vol, veh/h               | 246    | 30   | 83     | 1219  | 11     | 9    |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0     | 0      | 0    |
| Sign Control             | Free   | Free | Free   | Free  | Stop   | Stop |
| RT Channelized           | -      | None | -      | None  | -      | None |
| Storage Length           | -      | -    | -      | -     | 0      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0     | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0     | 0      | -    |
| Peak Hour Factor         | 92     | 92   | 92     | 92    | 88     | 88   |
| Heavy Vehicles, %        | 5      | 5    | 1      | 1     | 5      | 5    |
| Mvmt Flow                | 275    | 34   | 93     | 1365  | 13     | 11   |
| Major/Minor              | Major1 |      | Major2 |       | Minor1 |      |
| Conflicting Flow All     | 0      | 0    | 309    | 0     | 1160   | 155  |
| Stage 1                  | -      | -    | -      | -     | 292    | -    |
| Stage 2                  | -      | -    | -      | -     | 868    | -    |
| Critical Hdwy            | -      | -    | 4.12   | -     | 6.9    | 7    |
| Critical Hdwy Stg 1      | -      | -    | -      | -     | 5.9    | -    |
| Critical Hdwy Stg 2      | -      | -    | -      | -     | 5.9    | -    |
| Follow-up Hdwy           | -      | -    | 2.21   | -     | 3.55   | 3.35 |
| Pot Cap-1 Maneuver       | -      | -    | 1256   | -     | 184    | 854  |
| Stage 1                  | -      | -    | -      | -     | 723    | -    |
| Stage 2                  | -      | -    | -      | -     | 364    | -    |
| Platoon blocked, %       | -      | -    | -      | -     | -      | -    |
| Mov Cap-1 Maneuver       | -      | -    | 1256   | -     | 128    | 854  |
| Mov Cap-2 Maneuver       | -      | -    | -      | -     | 128    | -    |
| Stage 1                  | -      | -    | -      | -     | 723    | -    |
| Stage 2                  | -      | -    | -      | -     | 253    | -    |
| Approach                 | EB     |      | WB     |       | NB     |      |
| HCM Control Delay, s     | 0      |      | 1.5    |       | 24.6   |      |
| HCM LOS                  |        |      |        |       | C      |      |
| Minor Lane/Major Mvmt    | NBLn1  | EBT  | EBR    | WBL   | WBT    |      |
| Capacity (veh/h)         | 207    | -    | -      | 1256  | -      |      |
| HCM Lane V/C Ratio       | 0.113  | -    | -      | 0.074 | -      |      |
| HCM Control Delay (s)    | 24.6   | -    | -      | 8.1   | 1.1    |      |
| HCM Lane LOS             | C      | -    | -      | A     | A      |      |
| HCM 95th %tile Q(veh)    | 0.4    | -    | -      | 0.2   | -      |      |

# HCM 2010 Signalized Intersection Summary

## 7: SR 236/Hugh Howell Rd

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)               | 2                                                                                 | 250                                                                               | 12                                                                                | 5                                                                                 | 1221                                                                              | 3                                                                                 | 74                                                                                 | 0                                                                                   | 10                                                                                  | 5                                                                                   | 0                                                                                   | 25                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1810                                                                              | 1810                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1900                                                                                | 1845                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 2                                                                                 | 272                                                                               | 0                                                                                 | 5                                                                                 | 1327                                                                              | 0                                                                                 | 89                                                                                 | 0                                                                                   | 12                                                                                  | 7                                                                                   | 0                                                                                   | 34                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.83                                                                               | 0.83                                                                                | 0.83                                                                                | 0.73                                                                                | 0.73                                                                                | 0.73                                                                                |
| Percent Heavy Veh, %         | 5                                                                                 | 5                                                                                 | 5                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   | 171                                                                               | 1395                                                                              | 0                                                                                 | 896                                                                               | 1442                                                                              | 0                                                                                 | 194                                                                                | 0                                                                                   | 16                                                                                  | 60                                                                                  | 12                                                                                  | 119                                                                                 |
| Arrive On Green              | 0.00                                                                              | 0.77                                                                              | 0.00                                                                              | 0.01                                                                              | 0.77                                                                              | 0.00                                                                              | 0.09                                                                               | 0.00                                                                                | 0.09                                                                                | 0.09                                                                                | 0.00                                                                                | 0.09                                                                                |
| Sat Flow, veh/h              | 1723                                                                              | 1810                                                                              | 0                                                                                 | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1333                                                                               | 0                                                                                   | 180                                                                                 | 144                                                                                 | 136                                                                                 | 1358                                                                                |
| Grp Volume(v), veh/h         | 2                                                                                 | 272                                                                               | 0                                                                                 | 5                                                                                 | 1327                                                                              | 0                                                                                 | 101                                                                                | 0                                                                                   | 0                                                                                   | 41                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1723                                                                              | 1810                                                                              | 0                                                                                 | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1513                                                                               | 0                                                                                   | 0                                                                                   | 1638                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 3.6                                                                               | 0.0                                                                               | 0.1                                                                               | 49.4                                                                              | 0.0                                                                               | 3.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.0                                                                               | 3.6                                                                               | 0.0                                                                               | 0.1                                                                               | 49.4                                                                              | 0.0                                                                               | 5.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 0.88                                                                               |                                                                                     | 0.12                                                                                | 0.17                                                                                |                                                                                     | 0.83                                                                                |
| Lane Grp Cap(c), veh/h       | 171                                                                               | 1395                                                                              | 0                                                                                 | 896                                                                               | 1442                                                                              | 0                                                                                 | 210                                                                                | 0                                                                                   | 0                                                                                   | 192                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.01                                                                              | 0.20                                                                              | 0.00                                                                              | 0.01                                                                              | 0.92                                                                              | 0.00                                                                              | 0.48                                                                               | 0.00                                                                                | 0.00                                                                                | 0.21                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 245                                                                               | 1395                                                                              | 0                                                                                 | 967                                                                               | 1442                                                                              | 0                                                                                 | 341                                                                                | 0                                                                                   | 0                                                                                   | 335                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 16.0                                                                              | 2.7                                                                               | 0.0                                                                               | 2.3                                                                               | 7.8                                                                               | 0.0                                                                               | 39.1                                                                               | 0.0                                                                                 | 0.0                                                                                 | 37.7                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 11.0                                                                              | 0.0                                                                               | 1.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.6                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.0                                                                               | 1.9                                                                               | 0.0                                                                               | 0.0                                                                               | 29.1                                                                              | 0.0                                                                               | 2.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 1.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 16.1                                                                              | 3.0                                                                               | 0.0                                                                               | 2.3                                                                               | 18.9                                                                              | 0.0                                                                               | 40.8                                                                               | 0.0                                                                                 | 0.0                                                                                 | 38.2                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | B                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | B                                                                                 |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 274                                                                               |                                                                                   |                                                                                   | 1332                                                                              |                                                                                   |                                                                                    | 101                                                                                 |                                                                                     |                                                                                     | 41                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 3.1                                                                               |                                                                                   |                                                                                   | 18.8                                                                              |                                                                                   |                                                                                    | 40.8                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 4.5                                                                               | 72.0                                                                              |                                                                                   | 11.8                                                                              | 4.2                                                                               | 72.3                                                                              |                                                                                    | 11.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 68.0                                                                              |                                                                                   | 16.0                                                                              | 4.0                                                                               | 68.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 2.1                                                                               | 5.6                                                                               |                                                                                   | 7.6                                                                               | 2.0                                                                               | 51.4                                                                              |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 28.6                                                                              |                                                                                   | 0.4                                                                               | 0.0                                                                               | 12.4                                                                              |                                                                                    | 0.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 18.1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection                                                                                                         |        |      |        |          |          |       |
|----------------------------------------------------------------------------------------------------------------------|--------|------|--------|----------|----------|-------|
| Int Delay, s/veh                                                                                                     | 100.4  |      |        |          |          |       |
|                                                                                                                      |        |      |        |          |          |       |
| Movement                                                                                                             | EBL    | EBT  | WBT    | WBR      | SWL      | SWR   |
| Vol, veh/h                                                                                                           | 61     | 211  | 779    | 5        | 7        | 423   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0      | 0        | 0        | 0     |
| Sign Control                                                                                                         | Free   | Free | Free   | Free     | Stop     | Stop  |
| RT Channelized                                                                                                       | -      | None | -      | None     | -        | None  |
| Storage Length                                                                                                       | 400    | -    | -      | -        | 0        | -     |
| Veh in Median Storage, #                                                                                             | -      | 0    | 0      | -        | 0        | -     |
| Grade, %                                                                                                             | -      | 0    | 0      | -        | 0        | -     |
| Peak Hour Factor                                                                                                     | 90     | 90   | 82     | 82       | 83       | 83    |
| Heavy Vehicles, %                                                                                                    | 3      | 3    | 2      | 2        | 1        | 1     |
| Mvmt Flow                                                                                                            | 68     | 234  | 950    | 6        | 8        | 510   |
|                                                                                                                      |        |      |        |          |          |       |
| Major/Minor                                                                                                          | Major1 |      | Major2 |          | Minor2   |       |
| Conflicting Flow All                                                                                                 | 956    | 0    | -      | 0        | 1323     | 953   |
| Stage 1                                                                                                              | -      | -    | -      | -        | 953      | -     |
| Stage 2                                                                                                              | -      | -    | -      | -        | 370      | -     |
| Critical Hdwy                                                                                                        | 4.13   | -    | -      | -        | 6.41     | 6.21  |
| Critical Hdwy Stg 1                                                                                                  | -      | -    | -      | -        | 5.41     | -     |
| Critical Hdwy Stg 2                                                                                                  | -      | -    | -      | -        | 5.41     | -     |
| Follow-up Hdwy                                                                                                       | 2.227  | -    | -      | -        | 3.509    | 3.309 |
| Pot Cap-1 Maneuver                                                                                                   | 715    | -    | -      | -        | 173      | ~ 316 |
| Stage 1                                                                                                              | -      | -    | -      | -        | 376      | -     |
| Stage 2                                                                                                              | -      | -    | -      | -        | 701      | -     |
| Platoon blocked, %                                                                                                   |        | -    | -      | -        |          |       |
| Mov Cap-1 Maneuver                                                                                                   | 715    | -    | -      | -        | 157      | ~ 316 |
| Mov Cap-2 Maneuver                                                                                                   | -      | -    | -      | -        | 157      | -     |
| Stage 1                                                                                                              | -      | -    | -      | -        | 376      | -     |
| Stage 2                                                                                                              | -      | -    | -      | -        | 634      | -     |
|                                                                                                                      |        |      |        |          |          |       |
| Approach                                                                                                             | EB     |      | WB     |          | SW       |       |
| HCM Control Delay, s                                                                                                 | 2.4    |      | 0      |          | \$ 342.8 |       |
| HCM LOS                                                                                                              | F      |      |        |          |          |       |
|                                                                                                                      |        |      |        |          |          |       |
| Minor Lane/Major Mvmt                                                                                                | EBL    | EBT  | WBT    | WBRSWLn1 |          |       |
| Capacity (veh/h)                                                                                                     | 715    | -    | -      | -        | 311      |       |
| HCM Lane V/C Ratio                                                                                                   | 0.095  | -    | -      | -        | 1.666    |       |
| HCM Control Delay (s)                                                                                                | 10.6   | -    | -      | -        | \$ 342.8 |       |
| HCM Lane LOS                                                                                                         | B      | -    | -      | -        | F        |       |
| HCM 95th %tile Q(veh)                                                                                                | 0.3    | -    | -      | -        | 32       |       |
| Notes                                                                                                                |        |      |        |          |          |       |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |        |          |          |       |

# HCM 2010 Signalized Intersection Summary

## 9: Silver Hill Rd & SR 236/Hugh Howell Rd

6/21/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | NBL                                                                               | NBR                                                                               | SET                                                                               | SER                                                                               | NWL                                                                               | NWT                                                                               |   |      |
| Lane Configurations                                                  |  |                                                                                   |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 155                                                                               | 16                                                                                | 256                                                                               | 47                                                                                | 14                                                                                | 708                                                                               |   |      |
| Number                                                               | 3                                                                                 | 18                                                                                | 6                                                                                 | 16                                                                                | 5                                                                                 | 2                                                                                 |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 176                                                                               | 18                                                                                | 308                                                                               | 57                                                                                | 16                                                                                | 787                                                                               |   |      |
| Adj No. of Lanes                                                     | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.88                                                                              | 0.88                                                                              | 0.83                                                                              | 0.83                                                                              | 0.90                                                                              | 0.90                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                                                           | 230                                                                               | 23                                                                                | 872                                                                               | 161                                                                               | 660                                                                               | 1266                                                                              |   |      |
| Arrive On Green                                                      | 0.14                                                                              | 0.14                                                                              | 0.58                                                                              | 0.58                                                                              | 0.02                                                                              | 0.68                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1584                                                                              | 162                                                                               | 1515                                                                              | 280                                                                               | 1774                                                                              | 1863                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 195                                                                               | 0                                                                                 | 0                                                                                 | 365                                                                               | 16                                                                                | 787                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1755                                                                              | 0                                                                                 | 0                                                                                 | 1795                                                                              | 1774                                                                              | 1863                                                                              |   |      |
| Q Serve(g_s), s                                                      | 4.9                                                                               | 0.0                                                                               | 0.0                                                                               | 4.9                                                                               | 0.2                                                                               | 10.7                                                                              |   |      |
| Cycle Q Clear(g_c), s                                                | 4.9                                                                               | 0.0                                                                               | 0.0                                                                               | 4.9                                                                               | 0.2                                                                               | 10.7                                                                              |   |      |
| Prop In Lane                                                         | 0.90                                                                              | 0.09                                                                              |                                                                                   | 0.16                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h                                               | 254                                                                               | 0                                                                                 | 0                                                                                 | 1034                                                                              | 660                                                                               | 1266                                                                              |   |      |
| V/C Ratio(X)                                                         | 0.77                                                                              | 0.00                                                                              | 0.00                                                                              | 0.35                                                                              | 0.02                                                                              | 0.62                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 616                                                                               | 0                                                                                 | 0                                                                                 | 1034                                                                              | 787                                                                               | 1266                                                                              |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 18.8                                                                              | 0.0                                                                               | 0.0                                                                               | 5.1                                                                               | 3.6                                                                               | 4.1                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 4.8                                                                               | 0.0                                                                               | 0.0                                                                               | 0.9                                                                               | 0.0                                                                               | 2.3                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.7                                                                               | 0.0                                                                               | 0.0                                                                               | 2.7                                                                               | 0.1                                                                               | 6.1                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 23.6                                                                              | 0.0                                                                               | 0.0                                                                               | 6.1                                                                               | 3.6                                                                               | 6.4                                                                               |   |      |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h                                                  | 195                                                                               |                                                                                   | 365                                                                               |                                                                                   |                                                                                   | 803                                                                               |   |      |
| Approach Delay, s/veh                                                | 23.6                                                                              |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                   | 6.3                                                                               |   |      |
| Approach LOS                                                         | C                                                                                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   | 4.7                                                                               | 30.3                                                                              |   | 10.6 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 31.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 23.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+l1), s                                         |                                                                                   | 12.7                                                                              |                                                                                   |                                                                                   | 2.2                                                                               | 6.9                                                                               |   | 6.9  |
| Green Ext Time (p_c), s                                              |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 6.6                                                                               |   | 0.3  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 8.7                                                                               |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 10: Brockett Rd & US 29/L"Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 73                                                                                | 509                                                                               | 13                                                                                | 104                                                                               | 1075                                                                              | 163                                                                               | 118                                                                                 | 184                                                                                 | 201                                                                                 | 33                                                                                  | 44                                                                                  | 85                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                   | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1827                                                                              | 1827                                                                              | 1900                                                                              | 1863                                                                                | 1863                                                                                | 1863                                                                                | 1792                                                                                | 1792                                                                                | 1792                                                                                |
| Adj Flow Rate, veh/h         | 83                                                                                | 576                                                                               | 15                                                                                | 120                                                                               | 1244                                                                              | 189                                                                               | 141                                                                                 | 220                                                                                 | 241                                                                                 | 40                                                                                  | 54                                                                                  | 104                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.84                                                                                | 0.84                                                                                | 0.84                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 2                                                                                   | 2                                                                                   | 2                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 195                                                                               | 1419                                                                              | 37                                                                                | 452                                                                               | 1312                                                                              | 198                                                                               | 460                                                                                 | 481                                                                                 | 409                                                                                 | 299                                                                                 | 415                                                                                 | 352                                                                                 |
| Arrive On Green              | 0.05                                                                              | 0.42                                                                              | 0.42                                                                              | 0.06                                                                              | 0.43                                                                              | 0.43                                                                              | 0.06                                                                                | 0.26                                                                                | 0.26                                                                                | 0.03                                                                                | 0.23                                                                                | 0.23                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 3391                                                                              | 88                                                                                | 1740                                                                              | 3025                                                                              | 457                                                                               | 1774                                                                                | 1863                                                                                | 1583                                                                                | 1707                                                                                | 1792                                                                                | 1524                                                                                |
| Grp Volume(v), veh/h         | 83                                                                                | 289                                                                               | 302                                                                               | 120                                                                               | 711                                                                               | 722                                                                               | 141                                                                                 | 220                                                                                 | 241                                                                                 | 40                                                                                  | 54                                                                                  | 104                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1777                                                                              | 1740                                                                              | 1736                                                                              | 1746                                                                              | 1774                                                                                | 1863                                                                                | 1583                                                                                | 1707                                                                                | 1792                                                                                | 1524                                                                                |
| Q Serve(g_s), s              | 1.9                                                                               | 8.2                                                                               | 8.2                                                                               | 2.7                                                                               | 27.2                                                                              | 27.6                                                                              | 4.0                                                                                 | 6.9                                                                                 | 9.2                                                                                 | 1.2                                                                                 | 1.7                                                                                 | 3.9                                                                                 |
| Cycle Q Clear(g_c), s        | 1.9                                                                               | 8.2                                                                               | 8.2                                                                               | 2.7                                                                               | 27.2                                                                              | 27.6                                                                              | 4.0                                                                                 | 6.9                                                                                 | 9.2                                                                                 | 1.2                                                                                 | 1.7                                                                                 | 3.9                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.05                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 195                                                                               | 713                                                                               | 744                                                                               | 452                                                                               | 753                                                                               | 757                                                                               | 460                                                                                 | 481                                                                                 | 409                                                                                 | 299                                                                                 | 415                                                                                 | 352                                                                                 |
| V/C Ratio(X)                 | 0.43                                                                              | 0.41                                                                              | 0.41                                                                              | 0.27                                                                              | 0.94                                                                              | 0.95                                                                              | 0.31                                                                                | 0.46                                                                                | 0.59                                                                                | 0.13                                                                                | 0.13                                                                                | 0.30                                                                                |
| Avail Cap(c_a), veh/h        | 215                                                                               | 713                                                                               | 744                                                                               | 496                                                                               | 753                                                                               | 757                                                                               | 460                                                                                 | 481                                                                                 | 409                                                                                 | 344                                                                                 | 415                                                                                 | 352                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 16.3                                                                              | 14.1                                                                              | 14.1                                                                              | 10.6                                                                              | 18.8                                                                              | 18.9                                                                              | 19.1                                                                                | 21.6                                                                                | 22.5                                                                                | 19.5                                                                                | 21.1                                                                                | 21.9                                                                                |
| Incr Delay (d2), s/veh       | 1.5                                                                               | 1.7                                                                               | 1.6                                                                               | 0.3                                                                               | 21.7                                                                              | 23.2                                                                              | 0.4                                                                                 | 3.1                                                                                 | 6.1                                                                                 | 0.2                                                                                 | 0.6                                                                                 | 2.1                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.9                                                                               | 4.2                                                                               | 4.4                                                                               | 1.3                                                                               | 17.4                                                                              | 18.1                                                                              | 0.2                                                                                 | 4.0                                                                                 | 4.7                                                                                 | 0.6                                                                                 | 0.9                                                                                 | 1.8                                                                                 |
| LnGrp Delay(d),s/veh         | 17.8                                                                              | 15.8                                                                              | 15.7                                                                              | 10.9                                                                              | 40.5                                                                              | 42.1                                                                              | 19.5                                                                                | 24.7                                                                                | 28.6                                                                                | 19.7                                                                                | 21.7                                                                                | 24.1                                                                                |
| LnGrp LOS                    | B                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | D                                                                                 | D                                                                                 | B                                                                                   | C                                                                                   | C                                                                                   | B                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 674                                                                               |                                                                                   |                                                                                   | 1553                                                                              |                                                                                   |                                                                                     | 602                                                                                 |                                                                                     |                                                                                     | 198                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 16.0                                                                              |                                                                                   |                                                                                   | 39.0                                                                              |                                                                                   |                                                                                     | 25.0                                                                                |                                                                                     |                                                                                     | 22.5                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 8.2                                                                               | 33.0                                                                              | 6.1                                                                               | 21.9                                                                              | 7.2                                                                               | 34.0                                                                              | 8.0                                                                                 | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 28.0                                                                              | 4.0                                                                               | 16.0                                                                              | 4.0                                                                               | 30.0                                                                              | 4.0                                                                                 | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 4.7                                                                               | 10.2                                                                              | 3.2                                                                               | 11.2                                                                              | 3.9                                                                               | 29.6                                                                              | 6.0                                                                                 | 5.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 11.7                                                                              | 0.0                                                                               | 1.3                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                                 | 2.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 11: Idlewood Rd/Main St & US 29/L'Ville Hwy

6/21/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 118                                                                               | 381                                                                               | 116                                                                               | 122                                                                               | 1095                                                                              | 79                                                                                | 116                                                                                | 254                                                                                 | 113                                                                                 | 42                                                                                  | 140                                                                                 | 42                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1863                                                                               | 1863                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1810                                                                                |
| Adj Flow Rate, veh/h         | 134                                                                               | 431                                                                               | 131                                                                               | 141                                                                               | 1267                                                                              | 91                                                                                | 133                                                                                | 291                                                                                 | 129                                                                                 | 52                                                                                  | 174                                                                                 | 52                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 222                                                                               | 1072                                                                              | 323                                                                               | 468                                                                               | 1423                                                                              | 102                                                                               | 392                                                                                | 318                                                                                 | 141                                                                                 | 188                                                                                 | 394                                                                                 | 335                                                                                 |
| Arrive On Green              | 0.06                                                                              | 0.42                                                                              | 0.42                                                                              | 0.07                                                                              | 0.43                                                                              | 0.43                                                                              | 0.08                                                                               | 0.26                                                                                | 0.26                                                                                | 0.04                                                                                | 0.22                                                                                | 0.22                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 2581                                                                              | 777                                                                               | 1757                                                                              | 3317                                                                              | 238                                                                               | 1774                                                                               | 1224                                                                                | 543                                                                                 | 1723                                                                                | 1810                                                                                | 1538                                                                                |
| Grp Volume(v), veh/h         | 134                                                                               | 283                                                                               | 279                                                                               | 141                                                                               | 668                                                                               | 690                                                                               | 133                                                                                | 0                                                                                   | 420                                                                                 | 52                                                                                  | 174                                                                                 | 52                                                                                  |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1655                                                                              | 1757                                                                              | 1752                                                                              | 1803                                                                              | 1774                                                                               | 0                                                                                   | 1767                                                                                | 1723                                                                                | 1810                                                                                | 1538                                                                                |
| Q Serve(g_s), s              | 3.3                                                                               | 8.5                                                                               | 8.6                                                                               | 3.3                                                                               | 25.5                                                                              | 25.7                                                                              | 4.1                                                                                | 0.0                                                                                 | 16.8                                                                                | 1.7                                                                                 | 6.0                                                                                 | 2.0                                                                                 |
| Cycle Q Clear(g_c), s        | 3.3                                                                               | 8.5                                                                               | 8.6                                                                               | 3.3                                                                               | 25.5                                                                              | 25.7                                                                              | 4.1                                                                                | 0.0                                                                                 | 16.8                                                                                | 1.7                                                                                 | 6.0                                                                                 | 2.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.47                                                                              | 1.00                                                                              |                                                                                   | 0.13                                                                              | 1.00                                                                               |                                                                                     | 0.31                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 222                                                                               | 707                                                                               | 688                                                                               | 468                                                                               | 752                                                                               | 773                                                                               | 392                                                                                | 0                                                                                   | 459                                                                                 | 188                                                                                 | 394                                                                                 | 335                                                                                 |
| V/C Ratio(X)                 | 0.60                                                                              | 0.40                                                                              | 0.41                                                                              | 0.30                                                                              | 0.89                                                                              | 0.89                                                                              | 0.34                                                                               | 0.00                                                                                | 0.91                                                                                | 0.28                                                                                | 0.44                                                                                | 0.16                                                                                |
| Avail Cap(c_a), veh/h        | 222                                                                               | 707                                                                               | 688                                                                               | 493                                                                               | 773                                                                               | 795                                                                               | 401                                                                                | 0                                                                                   | 462                                                                                 | 221                                                                                 | 424                                                                                 | 360                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 16.7                                                                              | 14.9                                                                              | 14.9                                                                              | 11.1                                                                              | 19.1                                                                              | 19.2                                                                              | 19.1                                                                               | 0.0                                                                                 | 26.1                                                                                | 22.2                                                                                | 24.6                                                                                | 23.0                                                                                |
| Incr Delay (d2), s/veh       | 4.6                                                                               | 1.7                                                                               | 1.8                                                                               | 0.4                                                                               | 12.2                                                                              | 12.2                                                                              | 0.5                                                                                | 0.0                                                                                 | 22.7                                                                                | 0.8                                                                                 | 0.8                                                                                 | 0.2                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.8                                                                               | 4.3                                                                               | 4.2                                                                               | 1.6                                                                               | 14.8                                                                              | 15.3                                                                              | 2.0                                                                                | 0.0                                                                                 | 11.1                                                                                | 0.8                                                                                 | 3.1                                                                                 | 0.9                                                                                 |
| LnGrp Delay(d),s/veh         | 21.3                                                                              | 16.6                                                                              | 16.7                                                                              | 11.5                                                                              | 31.3                                                                              | 31.4                                                                              | 19.6                                                                               | 0.0                                                                                 | 48.8                                                                                | 23.0                                                                                | 25.3                                                                                | 23.2                                                                                |
| LnGrp LOS                    | C                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 | B                                                                                  |                                                                                     | D                                                                                   | C                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 696                                                                               |                                                                                   |                                                                                   | 1499                                                                              |                                                                                   |                                                                                    | 553                                                                                 |                                                                                     |                                                                                     | 278                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 17.5                                                                              |                                                                                   |                                                                                   | 29.5                                                                              |                                                                                   |                                                                                    | 41.7                                                                                |                                                                                     |                                                                                     | 24.5                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 34.2                                                                              | 6.6                                                                               | 22.9                                                                              | 8.0                                                                               | 35.1                                                                              | 9.6                                                                                | 19.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 30.0                                                                              | 4.0                                                                               | 19.0                                                                              | 4.0                                                                               | 32.0                                                                              | 6.0                                                                                | 17.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 5.3                                                                               | 10.6                                                                              | 3.7                                                                               | 18.8                                                                              | 5.3                                                                               | 27.7                                                                              | 6.1                                                                                | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 11.8                                                                              | 0.0                                                                               | 0.1                                                                               | 0.0                                                                               | 3.4                                                                               | 0.0                                                                                | 2.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 28.5                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 12: SR 236/Hugh Howell Rd & Silver Hill Rd

6/21/2016

|                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
|                              |  |  |  |  |  |  |   |      |
| Movement                     | WBL                                                                               | WBR                                                                               | SEL                                                                               | SET                                                                               | NWT                                                                               | NWR                                                                               |   |      |
| Lane Configurations          |  |  |  |  |  |  |   |      |
| Volume (veh/h)               | 50                                                                                | 162                                                                               | 113                                                                               | 157                                                                               | 558                                                                               | 41                                                                                |   |      |
| Number                       | 3                                                                                 | 18                                                                                | 1                                                                                 | 6                                                                                 | 2                                                                                 | 12                                                                                |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln       | 1827                                                                              | 1827                                                                              | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              |   |      |
| Adj Flow Rate, veh/h         | 58                                                                                | 0                                                                                 | 145                                                                               | 201                                                                               | 649                                                                               | 48                                                                                |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 |   |      |
| Peak Hour Factor             | 0.86                                                                              | 0.86                                                                              | 0.78                                                                              | 0.78                                                                              | 0.86                                                                              | 0.86                                                                              |   |      |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                   | 79                                                                                | 71                                                                                | 577                                                                               | 1455                                                                              | 1064                                                                              | 79                                                                                |   |      |
| Arrive On Green              | 0.05                                                                              | 0.00                                                                              | 0.07                                                                              | 0.78                                                                              | 0.62                                                                              | 0.62                                                                              |   |      |
| Sat Flow, veh/h              | 1740                                                                              | 1553                                                                              | 1774                                                                              | 1863                                                                              | 1714                                                                              | 127                                                                               |   |      |
| Grp Volume(v), veh/h         | 58                                                                                | 0                                                                                 | 145                                                                               | 201                                                                               | 0                                                                                 | 697                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1740                                                                              | 1553                                                                              | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1840                                                                              |   |      |
| Q Serve(g_s), s              | 1.5                                                                               | 0.0                                                                               | 1.1                                                                               | 1.2                                                                               | 0.0                                                                               | 10.7                                                                              |   |      |
| Cycle Q Clear(g_c), s        | 1.5                                                                               | 0.0                                                                               | 1.1                                                                               | 1.2                                                                               | 0.0                                                                               | 10.7                                                                              |   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |   |      |
| Lane Grp Cap(c), veh/h       | 79                                                                                | 71                                                                                | 577                                                                               | 1455                                                                              | 0                                                                                 | 1143                                                                              |   |      |
| V/C Ratio(X)                 | 0.73                                                                              | 0.00                                                                              | 0.25                                                                              | 0.14                                                                              | 0.00                                                                              | 0.61                                                                              |   |      |
| Avail Cap(c_a), veh/h        | 604                                                                               | 539                                                                               | 639                                                                               | 1455                                                                              | 0                                                                                 | 1143                                                                              |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh     | 21.7                                                                              | 0.0                                                                               | 3.9                                                                               | 1.2                                                                               | 0.0                                                                               | 5.3                                                                               |   |      |
| Incr Delay (d2), s/veh       | 12.2                                                                              | 0.0                                                                               | 0.2                                                                               | 0.2                                                                               | 0.0                                                                               | 2.4                                                                               |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln     | 1.0                                                                               | 0.0                                                                               | 0.6                                                                               | 0.7                                                                               | 0.0                                                                               | 6.0                                                                               |   |      |
| LnGrp Delay(d),s/veh         | 34.0                                                                              | 0.0                                                                               | 4.1                                                                               | 1.4                                                                               | 0.0                                                                               | 7.8                                                                               |   |      |
| LnGrp LOS                    | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 |   |      |
| Approach Vol, veh/h          | 58                                                                                |                                                                                   |                                                                                   | 346                                                                               | 697                                                                               |                                                                                   |   |      |
| Approach Delay, s/veh        | 34.0                                                                              |                                                                                   |                                                                                   | 2.6                                                                               | 7.8                                                                               |                                                                                   |   |      |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s     | 7.4                                                                               | 32.6                                                                              |                                                                                   |                                                                                   |                                                                                   | 40.0                                                                              |   | 6.1  |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 27.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+l1), s | 3.1                                                                               | 12.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 3.2                                                                               |   | 3.5  |
| Green Ext Time (p_c), s      | 0.1                                                                               | 4.7                                                                               |                                                                                   |                                                                                   |                                                                                   | 6.2                                                                               |   | 0.1  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 7.5                                                                               |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 1: Mtn Indus Blvd & US 78 WB Off Ramp/US 78 WB On Ramp

6/22/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |  |  |  |  |
| Volume (veh/h)                                                       | 462                                                                               | 0                                                                                 | 277                                                                               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1083                                                                                | 183                                                                                 | 454                                                                                 | 1316                                                                                | 0                                                                                   |
| Number                                                               | 7                                                                                 | 4                                                                                 | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1681                                                                              | 1681                                                                              | 1681                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1810                                                                                | 1810                                                                                | 1845                                                                                | 1845                                                                                | 0                                                                                   |
| Adj Flow Rate, veh/h                                                 | 560                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1268                                                                                | 0                                                                                   | 508                                                                                 | 1473                                                                                | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 3                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor                                                     | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                                 | 13                                                                                | 13                                                                                | 13                                                                                |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5                                                                                   | 5                                                                                   | 3                                                                                   | 3                                                                                   | 0                                                                                   |
| Cap, veh/h                                                           | 688                                                                               | 0                                                                                 | 307                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1856                                                                                | 578                                                                                 | 557                                                                                 | 2284                                                                                | 0                                                                                   |
| Arrive On Green                                                      | 0.21                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.38                                                                                | 0.00                                                                                | 0.21                                                                                | 0.65                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3203                                                                              | 0                                                                                 | 1429                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5103                                                                                | 1538                                                                                | 1757                                                                                | 3597                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h                                                 | 560                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1268                                                                                | 0                                                                                   | 508                                                                                 | 1473                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1601                                                                              | 0                                                                                 | 1429                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1647                                                                                | 1538                                                                                | 1757                                                                                | 1752                                                                                | 0                                                                                   |
| Q Serve(g_s), s                                                      | 10.0                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.9                                                                                | 0.0                                                                                 | 10.2                                                                                | 15.1                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 10.0                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.9                                                                                | 0.0                                                                                 | 10.2                                                                                | 15.1                                                                                | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 688                                                                               | 0                                                                                 | 307                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1856                                                                                | 578                                                                                 | 557                                                                                 | 2284                                                                                | 0                                                                                   |
| V/C Ratio(X)                                                         | 0.81                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.68                                                                                | 0.00                                                                                | 0.91                                                                                | 0.64                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 854                                                                               | 0                                                                                 | 381                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1856                                                                                | 578                                                                                 | 599                                                                                 | 2284                                                                                | 0                                                                                   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 1.00                                                                                | 0.00                                                                                | 0.11                                                                                | 0.11                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 22.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 15.7                                                                                | 0.0                                                                                 | 11.7                                                                                | 6.3                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 5.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 2.1                                                                                 | 0.0                                                                                 | 2.6                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 4.8                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 6.2                                                                                 | 0.0                                                                                 | 8.4                                                                                 | 7.2                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 27.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 17.8                                                                                | 0.0                                                                                 | 14.3                                                                                | 6.4                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 560                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1268                                                                                |                                                                                     |                                                                                     | 1981                                                                                |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 17.8                                                                                |                                                                                     |                                                                                     | 8.5                                                                                 |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             | 16.6                                                                              | 26.5                                                                              |                                                                                   | 16.9                                                                              |                                                                                   | 43.1                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          | 14.0                                                                              | 18.0                                                                              |                                                                                   | 16.0                                                                              |                                                                                   | 36.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         | 12.2                                                                              | 14.9                                                                              |                                                                                   | 12.0                                                                              |                                                                                   | 17.1                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              | 0.4                                                                               | 2.9                                                                               |                                                                                   | 0.9                                                                               |                                                                                   | 15.9                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 14.3                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |                                                                                   |                                                                                   |  |                                                                                   |  |  |  |                                                                                     |                                                                                     |  |  |
| Volume (veh/h)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 63                                                                                | 0                                                                                 | 181                                                                               | 301                                                                                 | 1280                                                                                | 0                                                                                   | 0                                                                                   | 1704                                                                                | 711                                                                                 |
| Number                       |                                                                                   |                                                                                   |                                                                                   | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          |                                                                                   |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       |                                                                                   |                                                                                   |                                                                                   | 1918                                                                              | 0                                                                                 | 1845                                                                              | 1792                                                                                | 1792                                                                                | 0                                                                                   | 0                                                                                   | 1839                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         |                                                                                   |                                                                                   |                                                                                   | 72                                                                                | 0                                                                                 | 207                                                                               | 352                                                                                 | 1498                                                                                | 0                                                                                   | 0                                                                                   | 1908                                                                                | 0                                                                                   |
| Adj No. of Lanes             |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   | 0                                                                                   | 0                                                                                   | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor             |                                                                                   |                                                                                   |                                                                                   | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         |                                                                                   |                                                                                   |                                                                                   | 3                                                                                 | 0                                                                                 | 3                                                                                 | 6                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   |                                                                                   |                                                                                   |                                                                                   | 280                                                                               | 0                                                                                 | 240                                                                               | 385                                                                                 | 2581                                                                                | 0                                                                                   | 0                                                                                   | 2894                                                                                | 0                                                                                   |
| Arrive On Green              |                                                                                   |                                                                                   |                                                                                   | 0.15                                                                              | 0.00                                                                              | 0.15                                                                              | 0.14                                                                                | 0.76                                                                                | 0.00                                                                                | 0.00                                                                                | 0.58                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              |                                                                                   |                                                                                   |                                                                                   | 1827                                                                              | 0                                                                                 | 1568                                                                              | 1707                                                                                | 3495                                                                                | 0                                                                                   | 0                                                                                   | 5353                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         |                                                                                   |                                                                                   |                                                                                   | 72                                                                                | 0                                                                                 | 207                                                                               | 352                                                                                 | 1498                                                                                | 0                                                                                   | 0                                                                                   | 1908                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     |                                                                                   |                                                                                   |                                                                                   | 1827                                                                              | 0                                                                                 | 1568                                                                              | 1707                                                                                | 1703                                                                                | 0                                                                                   | 0                                                                                   | 1674                                                                                | 0                                                                                   |
| Q Serve(g_s), s              |                                                                                   |                                                                                   |                                                                                   | 3.1                                                                               | 0.0                                                                               | 11.6                                                                              | 10.1                                                                                | 17.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 23.4                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        |                                                                                   |                                                                                   |                                                                                   | 3.1                                                                               | 0.0                                                                               | 11.6                                                                              | 10.1                                                                                | 17.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 23.4                                                                                | 0.0                                                                                 |
| Prop In Lane                 |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 0.00                                                                                | 0.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       |                                                                                   |                                                                                   |                                                                                   | 280                                                                               | 0                                                                                 | 240                                                                               | 385                                                                                 | 2581                                                                                | 0                                                                                   | 0                                                                                   | 2894                                                                                | 0                                                                                   |
| V/C Ratio(X)                 |                                                                                   |                                                                                   |                                                                                   | 0.26                                                                              | 0.00                                                                              | 0.86                                                                              | 0.91                                                                                | 0.58                                                                                | 0.00                                                                                | 0.00                                                                                | 0.66                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        |                                                                                   |                                                                                   |                                                                                   | 325                                                                               | 0                                                                                 | 279                                                                               | 417                                                                                 | 2581                                                                                | 0                                                                                   | 0                                                                                   | 2894                                                                                | 0                                                                                   |
| HCM Platoon Ratio            |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.43                                                                                | 0.43                                                                                | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     |                                                                                   |                                                                                   |                                                                                   | 33.6                                                                              | 0.0                                                                               | 37.2                                                                              | 22.6                                                                                | 4.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 13.0                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       |                                                                                   |                                                                                   |                                                                                   | 0.5                                                                               | 0.0                                                                               | 20.7                                                                              | 12.3                                                                                | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 1.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     |                                                                                   |                                                                                   |                                                                                   | 1.6                                                                               | 0.0                                                                               | 6.4                                                                               | 9.8                                                                                 | 8.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 10.9                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         |                                                                                   |                                                                                   |                                                                                   | 34.1                                                                              | 0.0                                                                               | 57.9                                                                              | 34.8                                                                                | 5.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 14.2                                                                                | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   | E                                                                                 | C                                                                                   | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 279                                                                               |                                                                                   |                                                                                     | 1850                                                                                |                                                                                     |                                                                                     | 1908                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 51.7                                                                              |                                                                                   |                                                                                     | 10.8                                                                                |                                                                                     |                                                                                     | 14.2                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 72.2                                                                              |                                                                                   |                                                                                   | 16.3                                                                              | 55.9                                                                              |                                                                                     | 17.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                   | 66.0                                                                              |                                                                                   |                                                                                   | 14.0                                                                              | 48.0                                                                              |                                                                                     | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                   | 19.1                                                                              |                                                                                   |                                                                                   | 12.1                                                                              | 25.4                                                                              |                                                                                     | 13.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 0.2                                                                               | 20.8                                                                              |                                                                                     | 0.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 15.2                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 83                                                                                | 794                                                                               | 239                                                                               | 94                                                                                | 314                                                                               | 64                                                                                | 207                                                                                 | 819                                                                                 | 119                                                                                 | 251                                                                                 | 1100                                                                                | 63                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1792                                                                                | 1792                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 93                                                                                | 889                                                                               | 268                                                                               | 105                                                                               | 352                                                                               | 72                                                                                | 232                                                                                 | 917                                                                                 | 133                                                                                 | 281                                                                                 | 1232                                                                                | 71                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 6                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 367                                                                               | 858                                                                               | 258                                                                               | 142                                                                               | 897                                                                               | 181                                                                               | 247                                                                                 | 1070                                                                                | 155                                                                                 | 320                                                                                 | 1256                                                                                | 72                                                                                  |
| Arrive On Green              | 0.05                                                                              | 0.32                                                                              | 0.32                                                                              | 0.04                                                                              | 0.31                                                                              | 0.31                                                                              | 0.10                                                                                | 0.36                                                                                | 0.36                                                                                | 0.12                                                                                | 0.38                                                                                | 0.38                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 2683                                                                              | 807                                                                               | 1757                                                                              | 2905                                                                              | 588                                                                               | 1707                                                                                | 2986                                                                                | 433                                                                                 | 1723                                                                                | 3305                                                                                | 190                                                                                 |
| Grp Volume(v), veh/h         | 93                                                                                | 586                                                                               | 571                                                                               | 105                                                                               | 211                                                                               | 213                                                                               | 232                                                                                 | 523                                                                                 | 527                                                                                 | 281                                                                                 | 640                                                                                 | 663                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1720                                                                              | 1757                                                                              | 1752                                                                              | 1741                                                                              | 1707                                                                                | 1703                                                                                | 1716                                                                                | 1723                                                                                | 1719                                                                                | 1776                                                                                |
| Q Serve(g_s), s              | 3.5                                                                               | 32.0                                                                              | 32.0                                                                              | 4.0                                                                               | 9.5                                                                               | 9.6                                                                               | 9.0                                                                                 | 28.4                                                                                | 28.5                                                                                | 10.1                                                                                | 36.8                                                                                | 36.9                                                                                |
| Cycle Q Clear(g_c), s        | 3.5                                                                               | 32.0                                                                              | 32.0                                                                              | 4.0                                                                               | 9.5                                                                               | 9.6                                                                               | 9.0                                                                                 | 28.4                                                                                | 28.5                                                                                | 10.1                                                                                | 36.8                                                                                | 36.9                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.47                                                                              | 1.00                                                                              |                                                                                   | 0.34                                                                              | 1.00                                                                                |                                                                                     | 0.25                                                                                | 1.00                                                                                |                                                                                     | 0.11                                                                                |
| Lane Grp Cap(c), veh/h       | 367                                                                               | 566                                                                               | 550                                                                               | 142                                                                               | 541                                                                               | 537                                                                               | 247                                                                                 | 610                                                                                 | 615                                                                                 | 320                                                                                 | 653                                                                                 | 675                                                                                 |
| V/C Ratio(X)                 | 0.25                                                                              | 1.03                                                                              | 1.04                                                                              | 0.74                                                                              | 0.39                                                                              | 0.40                                                                              | 0.94                                                                                | 0.86                                                                                | 0.86                                                                                | 0.88                                                                                | 0.98                                                                                | 0.98                                                                                |
| Avail Cap(c_a), veh/h        | 382                                                                               | 566                                                                               | 550                                                                               | 142                                                                               | 541                                                                               | 537                                                                               | 247                                                                                 | 610                                                                                 | 615                                                                                 | 334                                                                                 | 653                                                                                 | 675                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 22.1                                                                              | 34.0                                                                              | 34.0                                                                              | 28.0                                                                              | 27.2                                                                              | 27.2                                                                              | 25.2                                                                                | 29.7                                                                                | 29.7                                                                                | 22.0                                                                                | 30.6                                                                                | 30.7                                                                                |
| Incr Delay (d2), s/veh       | 0.4                                                                               | 47.0                                                                              | 48.4                                                                              | 18.2                                                                              | 0.5                                                                               | 0.5                                                                               | 40.8                                                                                | 14.5                                                                                | 14.4                                                                                | 21.7                                                                                | 30.7                                                                                | 30.5                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.8                                                                               | 23.0                                                                              | 22.5                                                                              | 1.7                                                                               | 4.6                                                                               | 4.7                                                                               | 9.1                                                                                 | 15.8                                                                                | 15.9                                                                                | 6.6                                                                                 | 23.0                                                                                | 23.8                                                                                |
| LnGrp Delay(d),s/veh         | 22.5                                                                              | 81.0                                                                              | 82.4                                                                              | 46.2                                                                              | 27.6                                                                              | 27.7                                                                              | 66.0                                                                                | 44.2                                                                                | 44.1                                                                                | 43.7                                                                                | 61.3                                                                                | 61.2                                                                                |
| LnGrp LOS                    | C                                                                                 | F                                                                                 | F                                                                                 | D                                                                                 | C                                                                                 | C                                                                                 | E                                                                                   | D                                                                                   | D                                                                                   | D                                                                                   | E                                                                                   | E                                                                                   |
| Approach Vol, veh/h          | 1250                                                                              |                                                                                   |                                                                                   | 529                                                                               |                                                                                   |                                                                                   | 1282                                                                                |                                                                                     |                                                                                     | 1584                                                                                |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 77.3                                                                              |                                                                                   |                                                                                   | 31.3                                                                              |                                                                                   |                                                                                   | 48.1                                                                                |                                                                                     |                                                                                     | 58.1                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | E                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 16.2                                                                              | 39.8                                                                              | 8.0                                                                               | 36.0                                                                              | 14.0                                                                              | 42.0                                                                              | 9.1                                                                                 | 34.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 13.0                                                                              | 35.0                                                                              | 4.0                                                                               | 32.0                                                                              | 10.0                                                                              | 38.0                                                                              | 6.0                                                                                 | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 12.1                                                                              | 30.5                                                                              | 6.0                                                                               | 34.0                                                                              | 11.0                                                                              | 38.9                                                                              | 5.5                                                                                 | 11.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.1                                                                               | 4.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 9.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 57.5                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 4: Mtn Indus. Blvd./Jimmy Carter Blvd & US 29/L'Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 239                                                                               | 1168                                                                              | 31                                                                                | 226                                                                               | 600                                                                               | 162                                                                               | 30                                                                                  | 609                                                                                 | 576                                                                                 | 256                                                                                 | 907                                                                                 | 280                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1827                                                                                | 1827                                                                                | 1827                                                                                | 1845                                                                                | 1845                                                                                | 1845                                                                                |
| Adj Flow Rate, veh/h         | 268                                                                               | 1308                                                                              | 35                                                                                | 253                                                                               | 672                                                                               | 181                                                                               | 35                                                                                  | 713                                                                                 | 0                                                                                   | 287                                                                                 | 1015                                                                                | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   | 396                                                                               | 1315                                                                              | 35                                                                                | 261                                                                               | 942                                                                               | 254                                                                               | 160                                                                                 | 741                                                                                 | 331                                                                                 | 291                                                                                 | 1308                                                                                | 585                                                                                 |
| Arrive On Green              | 0.12                                                                              | 0.37                                                                              | 0.37                                                                              | 0.09                                                                              | 0.34                                                                              | 0.34                                                                              | 0.21                                                                                | 0.21                                                                                | 0.00                                                                                | 0.11                                                                                | 0.37                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3522                                                                              | 94                                                                                | 1757                                                                              | 2732                                                                              | 735                                                                               | 543                                                                                 | 3471                                                                                | 1553                                                                                | 1757                                                                                | 3505                                                                                | 1568                                                                                |
| Grp Volume(v), veh/h         | 268                                                                               | 657                                                                               | 686                                                                               | 253                                                                               | 431                                                                               | 422                                                                               | 35                                                                                  | 713                                                                                 | 0                                                                                   | 287                                                                                 | 1015                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1846                                                                              | 1757                                                                              | 1752                                                                              | 1715                                                                              | 543                                                                                 | 1736                                                                                | 1553                                                                                | 1757                                                                                | 1752                                                                                | 1568                                                                                |
| Q Serve(g_s), s              | 7.1                                                                               | 27.7                                                                              | 27.8                                                                              | 7.0                                                                               | 16.0                                                                              | 16.0                                                                              | 4.6                                                                                 | 15.3                                                                                | 0.0                                                                                 | 8.0                                                                                 | 19.2                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 7.1                                                                               | 27.7                                                                              | 27.8                                                                              | 7.0                                                                               | 16.0                                                                              | 16.0                                                                              | 11.7                                                                                | 15.3                                                                                | 0.0                                                                                 | 8.0                                                                                 | 19.2                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.05                                                                              | 1.00                                                                              |                                                                                   | 0.43                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 396                                                                               | 661                                                                               | 689                                                                               | 261                                                                               | 604                                                                               | 591                                                                               | 160                                                                                 | 741                                                                                 | 331                                                                                 | 291                                                                                 | 1308                                                                                | 585                                                                                 |
| V/C Ratio(X)                 | 0.68                                                                              | 0.99                                                                              | 1.00                                                                              | 0.97                                                                              | 0.71                                                                              | 0.71                                                                              | 0.22                                                                                | 0.96                                                                                | 0.00                                                                                | 0.99                                                                                | 0.78                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 417                                                                               | 661                                                                               | 689                                                                               | 261                                                                               | 604                                                                               | 591                                                                               | 160                                                                                 | 741                                                                                 | 331                                                                                 | 291                                                                                 | 1308                                                                                | 585                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 15.4                                                                              | 23.4                                                                              | 23.4                                                                              | 18.5                                                                              | 21.3                                                                              | 21.4                                                                              | 31.2                                                                                | 29.2                                                                                | 0.0                                                                                 | 23.1                                                                                | 20.7                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 4.1                                                                               | 33.5                                                                              | 33.1                                                                              | 47.0                                                                              | 3.9                                                                               | 4.1                                                                               | 3.1                                                                                 | 25.2                                                                                | 0.0                                                                                 | 49.2                                                                                | 4.6                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 3.8                                                                               | 19.6                                                                              | 20.4                                                                              | 6.8                                                                               | 8.3                                                                               | 8.2                                                                               | 0.8                                                                                 | 9.8                                                                                 | 0.0                                                                                 | 6.0                                                                                 | 10.0                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 19.5                                                                              | 56.9                                                                              | 56.5                                                                              | 65.5                                                                              | 25.3                                                                              | 25.4                                                                              | 34.3                                                                                | 54.4                                                                                | 0.0                                                                                 | 72.3                                                                                | 25.3                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | B                                                                                 | E                                                                                 | E                                                                                 | E                                                                                 | C                                                                                 | C                                                                                 | C                                                                                   | D                                                                                   |                                                                                     | E                                                                                   | C                                                                                   |                                                                                     |
| Approach Vol, veh/h          | 1611                                                                              |                                                                                   |                                                                                   |                                                                                   | 1106                                                                              |                                                                                   |                                                                                     |                                                                                     | 748                                                                                 |                                                                                     | 1302                                                                                |                                                                                     |
| Approach Delay, s/veh        | 50.5                                                                              |                                                                                   |                                                                                   |                                                                                   | 34.5                                                                              |                                                                                   |                                                                                     |                                                                                     | 53.4                                                                                |                                                                                     | 35.7                                                                                |                                                                                     |
| Approach LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 |                                                                                   | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 12.0                                                                              | 20.0                                                                              | 11.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 13.1                                                                                | 29.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 8.0                                                                               | 16.0                                                                              | 7.0                                                                               | 28.0                                                                              |                                                                                   | 28.0                                                                              | 10.0                                                                                | 25.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 10.0                                                                              | 17.3                                                                              | 9.0                                                                               | 29.8                                                                              |                                                                                   | 21.2                                                                              | 9.1                                                                                 | 18.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 5.2                                                                               | 0.1                                                                                 | 5.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 43.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 5: US 29/L'Ville Hwy & SR 236/ Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |  |                                                                                     |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 679                                                                               | 688                                                                               | 14                                                                                | 1                                                                                 | 355                                                                               | 465                                                                               | 7                                                                                   | 15                                                                                  | 1                                                                                   | 809                                                                                 | 19                                                                                  | 730                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                   | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                                | 1881                                                                                | 1900                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                |
| Adj Flow Rate, veh/h         | 760                                                                               | 770                                                                               | 16                                                                                | 1                                                                                 | 420                                                                               | 0                                                                                 | 12                                                                                  | 26                                                                                  | 2                                                                                   | 932                                                                                 | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes             | 2                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                   | 1                                                                                   | 0                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.60                                                                                | 0.60                                                                                | 0.60                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 727                                                                               | 1536                                                                              | 32                                                                                | 202                                                                               | 629                                                                               | 281                                                                               | 98                                                                                  | 212                                                                                 | 16                                                                                  | 916                                                                                 | 0                                                                                   | 409                                                                                 |
| Arrive On Green              | 0.21                                                                              | 0.43                                                                              | 0.43                                                                              | 0.18                                                                              | 0.18                                                                              | 0.00                                                                              | 0.18                                                                                | 0.18                                                                                | 0.18                                                                                | 0.26                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 3442                                                                              | 3546                                                                              | 74                                                                                | 686                                                                               | 3539                                                                              | 1583                                                                              | 551                                                                                 | 1194                                                                                | 92                                                                                  | 3583                                                                                | 0                                                                                   | 1599                                                                                |
| Grp Volume(v), veh/h         | 760                                                                               | 384                                                                               | 402                                                                               | 1                                                                                 | 420                                                                               | 0                                                                                 | 40                                                                                  | 0                                                                                   | 0                                                                                   | 932                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1721                                                                              | 1770                                                                              | 1850                                                                              | 686                                                                               | 1770                                                                              | 1583                                                                              | 1837                                                                                | 0                                                                                   | 0                                                                                   | 1792                                                                                | 0                                                                                   | 1599                                                                                |
| Q Serve(g_s), s              | 19.0                                                                              | 14.1                                                                              | 14.2                                                                              | 0.1                                                                               | 10.0                                                                              | 0.0                                                                               | 1.6                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 23.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 19.0                                                                              | 14.1                                                                              | 14.2                                                                              | 0.1                                                                               | 10.0                                                                              | 0.0                                                                               | 1.6                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 23.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.04                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.30                                                                                |                                                                                     | 0.05                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 727                                                                               | 767                                                                               | 802                                                                               | 202                                                                               | 629                                                                               | 281                                                                               | 327                                                                                 | 0                                                                                   | 0                                                                                   | 916                                                                                 | 0                                                                                   | 409                                                                                 |
| V/C Ratio(X)                 | 1.05                                                                              | 0.50                                                                              | 0.50                                                                              | 0.00                                                                              | 0.67                                                                              | 0.00                                                                              | 0.12                                                                                | 0.00                                                                                | 0.00                                                                                | 1.02                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 727                                                                               | 767                                                                               | 802                                                                               | 202                                                                               | 629                                                                               | 281                                                                               | 327                                                                                 | 0                                                                                   | 0                                                                                   | 916                                                                                 | 0                                                                                   | 409                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 35.5                                                                              | 18.5                                                                              | 18.5                                                                              | 30.5                                                                              | 34.5                                                                              | 0.0                                                                               | 31.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 33.5                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 46.0                                                                              | 2.3                                                                               | 2.2                                                                               | 0.0                                                                               | 5.5                                                                               | 0.0                                                                               | 0.8                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 34.3                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 13.6                                                                              | 7.3                                                                               | 7.6                                                                               | 0.0                                                                               | 5.3                                                                               | 0.0                                                                               | 0.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 15.7                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 81.5                                                                              | 20.8                                                                              | 20.7                                                                              | 30.5                                                                              | 40.1                                                                              | 0.0                                                                               | 31.9                                                                                | 0.0                                                                                 | 0.0                                                                                 | 67.8                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | F                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | D                                                                                 |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | F                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 1546                                                                              |                                                                                   |                                                                                   | 421                                                                               |                                                                                   |                                                                                     | 40                                                                                  |                                                                                     |                                                                                     | 932                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 50.6                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                     | 31.9                                                                                |                                                                                     |                                                                                     | 67.8                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                   | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 43.0                                                                              |                                                                                   | 20.0                                                                              | 23.0                                                                              | 20.0                                                                              |                                                                                     | 27.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                   | 39.0                                                                              |                                                                                   | 16.0                                                                              | 19.0                                                                              | 16.0                                                                              |                                                                                     | 23.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                   | 16.2                                                                              |                                                                                   | 3.6                                                                               | 21.0                                                                              | 12.0                                                                              |                                                                                     | 25.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                   | 7.4                                                                               |                                                                                   | 0.1                                                                               | 0.0                                                                               | 2.4                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 54.3                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Intersection

Int Delay, s/veh 11.7

| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 1185 | 18   | 14   | 414  | 33   | 138  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 88   | 88   | 74   | 74   |
| Heavy Vehicles, %        | 1    | 1    | 3    | 3    | 3    | 3    |
| Mvmt Flow                | 1327 | 20   | 16   | 485  | 46   | 192  |

| Major/Minor          | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0      | 0      | 1347   |
| Stage 1              | -      | -      | 1337   |
| Stage 2              | -      | -      | 275    |
| Critical Hdwy        | -      | 4.16   | 6.86   |
| Critical Hdwy Stg 1  | -      | -      | 5.86   |
| Critical Hdwy Stg 2  | -      | -      | 5.86   |
| Follow-up Hdwy       | -      | 2.23   | 3.53   |
| Pot Cap-1 Maneuver   | -      | 502    | 94     |
| Stage 1              | -      | -      | 208    |
| Stage 2              | -      | -      | 744    |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | 502    | 90     |
| Mov Cap-2 Maneuver   | -      | -      | 90     |
| Stage 1              | -      | -      | 208    |
| Stage 2              | -      | -      | 711    |

| Approach             | EB | WB  | NB    |
|----------------------|----|-----|-------|
| HCM Control Delay, s | 0  | 0.7 | 101.3 |
| HCM LOS              |    |     | F     |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 239   | -   | -   | 502   | -   |
| HCM Lane V/C Ratio    | 0.996 | -   | -   | 0.033 | -   |
| HCM Control Delay (s) | 101.3 | -   | -   | 12.4  | 0.3 |
| HCM Lane LOS          | F     | -   | -   | B     | A   |
| HCM 95th %tile Q(veh) | 9.4   | -   | -   | 0.1   | -   |

# HCM 2010 Signalized Intersection Summary

## 7: SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)               | 13                                                                                | 1214                                                                              | 46                                                                                | 19                                                                                | 396                                                                               | 1                                                                                 | 24                                                                                 | 0                                                                                   | 19                                                                                  | 2                                                                                   | 0                                                                                   | 8                                                                                   |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1900                                                                                | 1863                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 15                                                                                | 1359                                                                              | 0                                                                                 | 23                                                                                | 474                                                                               | 0                                                                                 | 32                                                                                 | 0                                                                                   | 25                                                                                  | 3                                                                                   | 0                                                                                   | 12                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.77                                                                               | 0.77                                                                                | 0.77                                                                                | 0.69                                                                                | 0.69                                                                                | 0.69                                                                                |
| Percent Heavy Veh, %         | 1                                                                                 | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 799                                                                               | 1543                                                                              | 0                                                                                 | 238                                                                               | 1522                                                                              | 0                                                                                 | 93                                                                                 | 3                                                                                   | 34                                                                                  | 49                                                                                  | 7                                                                                   | 66                                                                                  |
| Arrive On Green              | 0.01                                                                              | 0.82                                                                              | 0.00                                                                              | 0.02                                                                              | 0.83                                                                              | 0.00                                                                              | 0.05                                                                               | 0.00                                                                                | 0.05                                                                                | 0.05                                                                                | 0.00                                                                                | 0.05                                                                                |
| Sat Flow, veh/h              | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1757                                                                              | 1845                                                                              | 0                                                                                 | 809                                                                                | 58                                                                                  | 677                                                                                 | 185                                                                                 | 148                                                                                 | 1331                                                                                |
| Grp Volume(v), veh/h         | 15                                                                                | 1359                                                                              | 0                                                                                 | 23                                                                                | 474                                                                               | 0                                                                                 | 57                                                                                 | 0                                                                                   | 0                                                                                   | 15                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1757                                                                              | 1845                                                                              | 0                                                                                 | 1543                                                                               | 0                                                                                   | 0                                                                                   | 1664                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.2                                                                               | 50.3                                                                              | 0.0                                                                               | 0.2                                                                               | 6.5                                                                               | 0.0                                                                               | 2.9                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.2                                                                               | 50.3                                                                              | 0.0                                                                               | 0.2                                                                               | 6.5                                                                               | 0.0                                                                               | 3.9                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 0.56                                                                               |                                                                                     | 0.44                                                                                | 0.20                                                                                |                                                                                     | 0.80                                                                                |
| Lane Grp Cap(c), veh/h       | 799                                                                               | 1543                                                                              | 0                                                                                 | 238                                                                               | 1522                                                                              | 0                                                                                 | 129                                                                                | 0                                                                                   | 0                                                                                   | 123                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.02                                                                              | 0.88                                                                              | 0.00                                                                              | 0.10                                                                              | 0.31                                                                              | 0.00                                                                              | 0.44                                                                               | 0.00                                                                                | 0.00                                                                                | 0.12                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 841                                                                               | 1543                                                                              | 0                                                                                 | 271                                                                               | 1522                                                                              | 0                                                                                 | 277                                                                                | 0                                                                                   | 0                                                                                   | 276                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 1.7                                                                               | 6.3                                                                               | 0.0                                                                               | 13.9                                                                              | 2.2                                                                               | 0.0                                                                               | 50.2                                                                               | 0.0                                                                                 | 0.0                                                                                 | 48.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 7.6                                                                               | 0.0                                                                               | 0.2                                                                               | 0.5                                                                               | 0.0                                                                               | 2.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.1                                                                               | 28.5                                                                              | 0.0                                                                               | 0.4                                                                               | 3.4                                                                               | 0.0                                                                               | 1.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 1.7                                                                               | 13.8                                                                              | 0.0                                                                               | 14.1                                                                              | 2.7                                                                               | 0.0                                                                               | 52.6                                                                               | 0.0                                                                                 | 0.0                                                                                 | 49.3                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | A                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | A                                                                                 |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 1374                                                                              |                                                                                   |                                                                                   | 497                                                                               |                                                                                   |                                                                                    | 57                                                                                  |                                                                                     |                                                                                     | 15                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 13.7                                                                              |                                                                                   |                                                                                   | 3.3                                                                               |                                                                                   |                                                                                    | 52.6                                                                                |                                                                                     |                                                                                     | 49.3                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 6.0                                                                               | 92.0                                                                              |                                                                                   | 9.3                                                                               | 5.4                                                                               | 92.5                                                                              |                                                                                    | 9.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 88.0                                                                              |                                                                                   | 16.0                                                                              | 4.0                                                                               | 88.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 2.2                                                                               | 52.3                                                                              |                                                                                   | 5.9                                                                               | 2.2                                                                               | 8.5                                                                               |                                                                                    | 2.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 22.7                                                                              |                                                                                   | 0.2                                                                               | 0.0                                                                               | 33.9                                                                              |                                                                                    | 0.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 12.4                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection             |        |      |        |          |        |       |
|--------------------------|--------|------|--------|----------|--------|-------|
| Int Delay, s/veh         | 3.5    |      |        |          |        |       |
| Movement                 | EBL    | EBT  | WBT    | WBR      | SWL    | SWR   |
| Vol, veh/h               | 367    | 871  | 279    | 5        | 4      | 142   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0        | 0      | 0     |
| Sign Control             | Free   | Free | Free   | Free     | Stop   | Stop  |
| RT Channelized           | -      | None | -      | None     | -      | None  |
| Storage Length           | 400    | -    | -      | -        | 0      | -     |
| Veh in Median Storage, # | -      | 0    | 0      | -        | 0      | -     |
| Grade, %                 | -      | 0    | 0      | -        | 0      | -     |
| Peak Hour Factor         | 92     | 92   | 85     | 85       | 91     | 91    |
| Heavy Vehicles, %        | 1      | 1    | 3      | 3        | 1      | 1     |
| Mvmt Flow                | 411    | 975  | 338    | 6        | 5      | 161   |
| Major/Minor              | Major1 |      | Major2 |          | Minor2 |       |
| Conflicting Flow All     | 344    | 0    | -      | 0        | 2138   | 341   |
| Stage 1                  | -      | -    | -      | -        | 341    | -     |
| Stage 2                  | -      | -    | -      | -        | 1797   | -     |
| Critical Hdwy            | 4.11   | -    | -      | -        | 6.41   | 6.21  |
| Critical Hdwy Stg 1      | -      | -    | -      | -        | 5.41   | -     |
| Critical Hdwy Stg 2      | -      | -    | -      | -        | 5.41   | -     |
| Follow-up Hdwy           | 2.209  | -    | -      | -        | 3.509  | 3.309 |
| Pot Cap-1 Maneuver       | 1221   | -    | -      | -        | 54     | 704   |
| Stage 1                  | -      | -    | -      | -        | 722    | -     |
| Stage 2                  | -      | -    | -      | -        | 146    | -     |
| Platoon blocked, %       | -      | -    | -      | -        | -      | -     |
| Mov Cap-1 Maneuver       | 1221   | -    | -      | -        | 36     | 704   |
| Mov Cap-2 Maneuver       | -      | -    | -      | -        | 36     | -     |
| Stage 1                  | -      | -    | -      | -        | 722    | -     |
| Stage 2                  | -      | -    | -      | -        | 97     | -     |
| Approach                 | EB     |      | WB     |          | SW     |       |
| HCM Control Delay, s     | 2.8    |      | 0      |          | 16.9   |       |
| HCM LOS                  |        |      |        |          | C      |       |
| Minor Lane/Major Mvmt    | EBL    | EBT  | WBT    | WBRSWLn1 |        |       |
| Capacity (veh/h)         | 1221   | -    | -      | -        | 467    |       |
| HCM Lane V/C Ratio       | 0.337  | -    | -      | -        | 0.354  |       |
| HCM Control Delay (s)    | 9.4    | -    | -      | -        | 16.9   |       |
| HCM Lane LOS             | A      | -    | -      | -        | C      |       |
| HCM 95th %tile Q(veh)    | 1.5    | -    | -      | -        | 1.6    |       |

# HCM 2010 Signalized Intersection Summary

## 9: Silver Hill Rd & SR 236/Hugh Howell Rd

6/22/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | NBL                                                                               | NBR                                                                               | SET                                                                               | SER                                                                               | NWL                                                                               | NWT                                                                               |   |      |
| Lane Configurations                                                  |  |                                                                                   |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 58                                                                                | 15                                                                                | 842                                                                               | 216                                                                               | 12                                                                                | 272                                                                               |   |      |
| Number                                                               | 3                                                                                 | 18                                                                                | 6                                                                                 | 16                                                                                | 5                                                                                 | 2                                                                                 |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1881                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 88                                                                                | 23                                                                                | 943                                                                               | 242                                                                               | 14                                                                                | 326                                                                               |   |      |
| Adj No. of Lanes                                                     | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.68                                                                              | 0.68                                                                              | 0.92                                                                              | 0.92                                                                              | 0.86                                                                              | 0.86                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Cap, veh/h                                                           | 113                                                                               | 30                                                                                | 1092                                                                              | 280                                                                               | 254                                                                               | 1540                                                                              |   |      |
| Arrive On Green                                                      | 0.08                                                                              | 0.08                                                                              | 0.76                                                                              | 0.76                                                                              | 0.01                                                                              | 0.82                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1374                                                                              | 359                                                                               | 1445                                                                              | 371                                                                               | 1792                                                                              | 1881                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 112                                                                               | 0                                                                                 | 0                                                                                 | 1185                                                                              | 14                                                                                | 326                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1749                                                                              | 0                                                                                 | 0                                                                                 | 1816                                                                              | 1792                                                                              | 1881                                                                              |   |      |
| Q Serve(g_s), s                                                      | 5.1                                                                               | 0.0                                                                               | 0.0                                                                               | 37.0                                                                              | 0.1                                                                               | 3.1                                                                               |   |      |
| Cycle Q Clear(g_c), s                                                | 5.1                                                                               | 0.0                                                                               | 0.0                                                                               | 37.0                                                                              | 0.1                                                                               | 3.1                                                                               |   |      |
| Prop In Lane                                                         | 0.79                                                                              | 0.21                                                                              |                                                                                   | 0.20                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h                                               | 144                                                                               | 0                                                                                 | 0                                                                                 | 1372                                                                              | 254                                                                               | 1540                                                                              |   |      |
| V/C Ratio(X)                                                         | 0.78                                                                              | 0.00                                                                              | 0.00                                                                              | 0.86                                                                              | 0.06                                                                              | 0.21                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 347                                                                               | 0                                                                                 | 0                                                                                 | 1372                                                                              | 319                                                                               | 1540                                                                              |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 36.3                                                                              | 0.0                                                                               | 0.0                                                                               | 6.9                                                                               | 11.5                                                                              | 1.6                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 8.7                                                                               | 0.0                                                                               | 0.0                                                                               | 7.4                                                                               | 0.1                                                                               | 0.3                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.8                                                                               | 0.0                                                                               | 0.0                                                                               | 20.9                                                                              | 0.2                                                                               | 1.7                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 45.0                                                                              | 0.0                                                                               | 0.0                                                                               | 14.4                                                                              | 11.6                                                                              | 1.9                                                                               |   |      |
| LnGrp LOS                                                            | D                                                                                 |                                                                                   |                                                                                   | B                                                                                 | B                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h                                                  | 112                                                                               |                                                                                   | 1185                                                                              |                                                                                   |                                                                                   | 340                                                                               |   |      |
| Approach Delay, s/veh                                                | 45.0                                                                              |                                                                                   | 14.4                                                                              |                                                                                   |                                                                                   | 2.3                                                                               |   |      |
| Approach LOS                                                         | D                                                                                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 70.0                                                                              |                                                                                   |                                                                                   | 5.1                                                                               | 64.9                                                                              |   | 10.6 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 66.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 58.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 5.1                                                                               |                                                                                   |                                                                                   | 2.1                                                                               | 39.0                                                                              |   | 7.1  |
| Green Ext Time (p_c), s                                              |                                                                                   | 19.5                                                                              |                                                                                   |                                                                                   | 0.0                                                                               | 11.4                                                                              |   | 0.2  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 14.0                                                                              |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 10: Brockett Rd & US 29/L"Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 77                                                                                | 1053                                                                              | 48                                                                                | 327                                                                               | 784                                                                               | 58                                                                                | 36                                                                                 | 84                                                                                  | 275                                                                                 | 136                                                                                 | 284                                                                                 | 172                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                               | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                |
| Adj Flow Rate, veh/h         | 87                                                                                | 1192                                                                              | 54                                                                                | 366                                                                               | 878                                                                               | 65                                                                                | 43                                                                                 | 99                                                                                  | 326                                                                                 | 154                                                                                 | 321                                                                                 | 195                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.87                                                                               | 0.87                                                                                | 0.87                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 380                                                                               | 1494                                                                              | 68                                                                                | 404                                                                               | 1787                                                                              | 132                                                                               | 173                                                                                | 360                                                                                 | 306                                                                                 | 303                                                                                 | 389                                                                                 | 331                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.43                                                                              | 0.43                                                                              | 0.15                                                                              | 0.54                                                                              | 0.54                                                                              | 0.03                                                                               | 0.19                                                                                | 0.19                                                                                | 0.04                                                                                | 0.21                                                                                | 0.21                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3449                                                                              | 156                                                                               | 1757                                                                              | 3309                                                                              | 245                                                                               | 1792                                                                               | 1881                                                                                | 1599                                                                                | 1792                                                                                | 1881                                                                                | 1599                                                                                |
| Grp Volume(v), veh/h         | 87                                                                                | 611                                                                               | 635                                                                               | 366                                                                               | 465                                                                               | 478                                                                               | 43                                                                                 | 99                                                                                  | 326                                                                                 | 154                                                                                 | 321                                                                                 | 195                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1835                                                                              | 1757                                                                              | 1752                                                                              | 1801                                                                              | 1792                                                                               | 1881                                                                                | 1599                                                                                | 1792                                                                                | 1881                                                                                | 1599                                                                                |
| Q Serve(g_s), s              | 2.4                                                                               | 26.6                                                                              | 26.6                                                                              | 10.9                                                                              | 14.8                                                                              | 14.8                                                                              | 1.7                                                                                | 4.0                                                                                 | 17.0                                                                                | 4.0                                                                                 | 14.5                                                                                | 9.8                                                                                 |
| Cycle Q Clear(g_c), s        | 2.4                                                                               | 26.6                                                                              | 26.6                                                                              | 10.9                                                                              | 14.8                                                                              | 14.8                                                                              | 1.7                                                                                | 4.0                                                                                 | 17.0                                                                                | 4.0                                                                                 | 14.5                                                                                | 9.8                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.09                                                                              | 1.00                                                                              |                                                                                   | 0.14                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 380                                                                               | 767                                                                               | 795                                                                               | 404                                                                               | 946                                                                               | 973                                                                               | 173                                                                                | 360                                                                                 | 306                                                                                 | 303                                                                                 | 389                                                                                 | 331                                                                                 |
| V/C Ratio(X)                 | 0.23                                                                              | 0.80                                                                              | 0.80                                                                              | 0.91                                                                              | 0.49                                                                              | 0.49                                                                              | 0.25                                                                               | 0.28                                                                                | 1.07                                                                                | 0.51                                                                                | 0.83                                                                                | 0.59                                                                                |
| Avail Cap(c_a), veh/h        | 402                                                                               | 767                                                                               | 795                                                                               | 476                                                                               | 946                                                                               | 973                                                                               | 200                                                                                | 360                                                                                 | 306                                                                                 | 303                                                                                 | 389                                                                                 | 331                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 13.0                                                                              | 21.8                                                                              | 21.8                                                                              | 20.3                                                                              | 12.8                                                                              | 12.8                                                                              | 28.7                                                                               | 30.7                                                                                | 35.9                                                                                | 30.2                                                                                | 33.7                                                                                | 31.8                                                                                |
| Incr Delay (d2), s/veh       | 0.3                                                                               | 8.5                                                                               | 8.2                                                                               | 18.8                                                                              | 1.8                                                                               | 1.8                                                                               | 0.7                                                                                | 1.9                                                                                 | 70.0                                                                                | 1.4                                                                                 | 17.8                                                                                | 7.5                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.2                                                                               | 14.7                                                                              | 15.2                                                                              | 10.9                                                                              | 7.6                                                                               | 7.8                                                                               | 0.9                                                                                | 2.3                                                                                 | 13.4                                                                                | 1.6                                                                                 | 9.4                                                                                 | 5.0                                                                                 |
| LnGrp Delay(d),s/veh         | 13.3                                                                              | 30.3                                                                              | 30.0                                                                              | 39.2                                                                              | 14.6                                                                              | 14.6                                                                              | 29.4                                                                               | 32.6                                                                                | 106.0                                                                               | 31.6                                                                                | 51.5                                                                                | 39.4                                                                                |
| LnGrp LOS                    | B                                                                                 | C                                                                                 | C                                                                                 | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                  | C                                                                                   | F                                                                                   | C                                                                                   | D                                                                                   | D                                                                                   |
| Approach Vol, veh/h          | 1333                                                                              |                                                                                   |                                                                                   |                                                                                   | 1309                                                                              |                                                                                   | 468                                                                                |                                                                                     |                                                                                     |                                                                                     | 670                                                                                 |                                                                                     |
| Approach Delay, s/veh        | 29.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 21.5                                                                              |                                                                                   | 83.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 43.4                                                                                |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   | F                                                                                  |                                                                                     |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 17.4                                                                              | 42.5                                                                              | 8.0                                                                               | 21.0                                                                              | 7.9                                                                               | 52.0                                                                              | 6.6                                                                                | 22.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 17.0                                                                              | 36.0                                                                              | 4.0                                                                               | 17.0                                                                              | 5.0                                                                               | 48.0                                                                              | 4.0                                                                                | 17.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 12.9                                                                              | 28.6                                                                              | 6.0                                                                               | 19.0                                                                              | 4.4                                                                               | 16.8                                                                              | 3.7                                                                                | 16.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.4                                                                               | 6.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 17.7                                                                              | 0.0                                                                                | 0.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 35.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 11: Idlewood Rd/Main St & US 29/L'Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 66                                                                                | 1061                                                                              | 141                                                                               | 178                                                                               | 843                                                                               | 71                                                                                | 64                                                                                  | 105                                                                                 | 172                                                                                 | 144                                                                                 | 245                                                                                 | 131                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                   | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                                | 1881                                                                                | 1900                                                                                | 1863                                                                                | 1863                                                                                | 1863                                                                                |
| Adj Flow Rate, veh/h         | 79                                                                                | 1271                                                                              | 169                                                                               | 213                                                                               | 1010                                                                              | 85                                                                                | 79                                                                                  | 130                                                                                 | 213                                                                                 | 161                                                                                 | 274                                                                                 | 147                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 302                                                                               | 1417                                                                              | 187                                                                               | 268                                                                               | 1621                                                                              | 136                                                                               | 254                                                                                 | 129                                                                                 | 211                                                                                 | 201                                                                                 | 398                                                                                 | 338                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.45                                                                              | 0.45                                                                              | 0.09                                                                              | 0.50                                                                              | 0.50                                                                              | 0.05                                                                                | 0.20                                                                                | 0.20                                                                                | 0.06                                                                                | 0.21                                                                                | 0.21                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3143                                                                              | 416                                                                               | 1757                                                                              | 3273                                                                              | 275                                                                               | 1792                                                                                | 643                                                                                 | 1053                                                                                | 1774                                                                                | 1863                                                                                | 1583                                                                                |
| Grp Volume(v), veh/h         | 79                                                                                | 713                                                                               | 727                                                                               | 213                                                                               | 541                                                                               | 554                                                                               | 79                                                                                  | 0                                                                                   | 343                                                                                 | 161                                                                                 | 274                                                                                 | 147                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1789                                                                              | 1757                                                                              | 1752                                                                              | 1796                                                                              | 1792                                                                                | 0                                                                                   | 1695                                                                                | 1774                                                                                | 1863                                                                                | 1583                                                                                |
| Q Serve(g_s), s              | 1.9                                                                               | 29.6                                                                              | 30.0                                                                              | 4.9                                                                               | 18.0                                                                              | 18.0                                                                              | 2.8                                                                                 | 0.0                                                                                 | 16.0                                                                                | 5.0                                                                                 | 10.8                                                                                | 6.4                                                                                 |
| Cycle Q Clear(g_c), s        | 1.9                                                                               | 29.6                                                                              | 30.0                                                                              | 4.9                                                                               | 18.0                                                                              | 18.0                                                                              | 2.8                                                                                 | 0.0                                                                                 | 16.0                                                                                | 5.0                                                                                 | 10.8                                                                                | 6.4                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.23                                                                              | 1.00                                                                              |                                                                                   | 0.15                                                                              | 1.00                                                                                |                                                                                     | 0.62                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 302                                                                               | 798                                                                               | 807                                                                               | 268                                                                               | 868                                                                               | 889                                                                               | 254                                                                                 | 0                                                                                   | 340                                                                                 | 201                                                                                 | 398                                                                                 | 338                                                                                 |
| V/C Ratio(X)                 | 0.26                                                                              | 0.89                                                                              | 0.90                                                                              | 0.79                                                                              | 0.62                                                                              | 0.62                                                                              | 0.31                                                                                | 0.00                                                                                | 1.01                                                                                | 0.80                                                                                | 0.69                                                                                | 0.43                                                                                |
| Avail Cap(c_a), veh/h        | 362                                                                               | 798                                                                               | 807                                                                               | 272                                                                               | 868                                                                               | 889                                                                               | 256                                                                                 | 0                                                                                   | 340                                                                                 | 201                                                                                 | 398                                                                                 | 338                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 12.3                                                                              | 20.2                                                                              | 20.3                                                                              | 17.4                                                                              | 14.7                                                                              | 14.7                                                                              | 24.2                                                                                | 0.0                                                                                 | 31.9                                                                                | 27.2                                                                                | 28.9                                                                                | 27.2                                                                                |
| Incr Delay (d2), s/veh       | 0.5                                                                               | 14.5                                                                              | 15.2                                                                              | 14.8                                                                              | 1.4                                                                               | 1.4                                                                               | 0.7                                                                                 | 0.0                                                                                 | 51.2                                                                                | 20.1                                                                                | 4.9                                                                                 | 0.9                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.9                                                                               | 17.5                                                                              | 18.2                                                                              | 3.4                                                                               | 8.9                                                                               | 9.1                                                                               | 1.4                                                                                 | 0.0                                                                                 | 12.2                                                                                | 2.2                                                                                 | 6.1                                                                                 | 2.9                                                                                 |
| LnGrp Delay(d),s/veh         | 12.8                                                                              | 34.6                                                                              | 35.5                                                                              | 32.2                                                                              | 16.1                                                                              | 16.1                                                                              | 24.8                                                                                | 0.0                                                                                 | 83.2                                                                                | 47.2                                                                                | 33.9                                                                                | 28.1                                                                                |
| LnGrp LOS                    | B                                                                                 | C                                                                                 | D                                                                                 | C                                                                                 | B                                                                                 | B                                                                                 | C                                                                                   |                                                                                     | F                                                                                   | D                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          | 1519                                                                              |                                                                                   |                                                                                   | 1308                                                                              |                                                                                   |                                                                                   |                                                                                     | 422                                                                                 |                                                                                     | 582                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 33.9                                                                              |                                                                                   |                                                                                   | 18.7                                                                              |                                                                                   |                                                                                   |                                                                                     | 72.3                                                                                |                                                                                     | 36.1                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                     | E                                                                                   |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 10.8                                                                              | 40.0                                                                              | 9.0                                                                               | 20.0                                                                              | 7.3                                                                               | 43.5                                                                              | 7.9                                                                                 | 21.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 7.0                                                                               | 36.0                                                                              | 5.0                                                                               | 16.0                                                                              | 6.0                                                                               | 37.0                                                                              | 4.0                                                                                 | 17.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 6.9                                                                               | 32.0                                                                              | 7.0                                                                               | 18.0                                                                              | 3.9                                                                               | 20.0                                                                              | 4.8                                                                                 | 12.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 3.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 13.5                                                                              | 0.0                                                                                 | 1.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 33.3                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 12: SR 236/Hugh Howell Rd & Silver Hill Rd

6/22/2016

|                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
|                              |  |  |  |  |  |  |   |      |
| Movement                     | WBL                                                                               | WBR                                                                               | SEL                                                                               | SET                                                                               | NWT                                                                               | NWR                                                                               |   |      |
| Lane Configurations          |  |  |  |  |  |  |   |      |
| Volume (veh/h)               | 18                                                                                | 49                                                                                | 98                                                                                | 760                                                                               | 240                                                                               | 35                                                                                |   |      |
| Number                       | 3                                                                                 | 18                                                                                | 1                                                                                 | 6                                                                                 | 2                                                                                 | 12                                                                                |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln       | 1845                                                                              | 1845                                                                              | 1881                                                                              | 1881                                                                              | 1881                                                                              | 1900                                                                              |   |      |
| Adj Flow Rate, veh/h         | 29                                                                                | 0                                                                                 | 110                                                                               | 851                                                                               | 281                                                                               | 41                                                                                |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 |   |      |
| Peak Hour Factor             | 0.63                                                                              | 0.63                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                              | 0.88                                                                              |   |      |
| Percent Heavy Veh, %         | 3                                                                                 | 3                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Cap, veh/h                   | 47                                                                                | 42                                                                                | 879                                                                               | 1498                                                                              | 1030                                                                              | 150                                                                               |   |      |
| Arrive On Green              | 0.03                                                                              | 0.00                                                                              | 0.07                                                                              | 0.80                                                                              | 0.64                                                                              | 0.64                                                                              |   |      |
| Sat Flow, veh/h              | 1757                                                                              | 1568                                                                              | 1792                                                                              | 1881                                                                              | 1606                                                                              | 234                                                                               |   |      |
| Grp Volume(v), veh/h         | 29                                                                                | 0                                                                                 | 110                                                                               | 851                                                                               | 0                                                                                 | 322                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1757                                                                              | 1568                                                                              | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1840                                                                              |   |      |
| Q Serve(g_s), s              | 0.7                                                                               | 0.0                                                                               | 0.7                                                                               | 7.6                                                                               | 0.0                                                                               | 3.4                                                                               |   |      |
| Cycle Q Clear(g_c), s        | 0.7                                                                               | 0.0                                                                               | 0.7                                                                               | 7.6                                                                               | 0.0                                                                               | 3.4                                                                               |   |      |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 0.13                                                                              |   |      |
| Lane Grp Cap(c), veh/h       | 47                                                                                | 42                                                                                | 879                                                                               | 1498                                                                              | 0                                                                                 | 1180                                                                              |   |      |
| V/C Ratio(X)                 | 0.61                                                                              | 0.00                                                                              | 0.13                                                                              | 0.57                                                                              | 0.00                                                                              | 0.27                                                                              |   |      |
| Avail Cap(c_a), veh/h        | 622                                                                               | 555                                                                               | 919                                                                               | 1498                                                                              | 0                                                                                 | 1180                                                                              |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh     | 21.8                                                                              | 0.0                                                                               | 1.8                                                                               | 1.7                                                                               | 0.0                                                                               | 3.5                                                                               |   |      |
| Incr Delay (d2), s/veh       | 12.1                                                                              | 0.0                                                                               | 0.1                                                                               | 1.6                                                                               | 0.0                                                                               | 0.6                                                                               |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln     | 0.5                                                                               | 0.0                                                                               | 0.3                                                                               | 4.4                                                                               | 0.0                                                                               | 1.9                                                                               |   |      |
| LnGrp Delay(d),s/veh         | 33.8                                                                              | 0.0                                                                               | 1.9                                                                               | 3.3                                                                               | 0.0                                                                               | 4.1                                                                               |   |      |
| LnGrp LOS                    | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 |   |      |
| Approach Vol, veh/h          | 29                                                                                |                                                                                   |                                                                                   | 961                                                                               | 322                                                                               |                                                                                   |   |      |
| Approach Delay, s/veh        | 33.8                                                                              |                                                                                   |                                                                                   | 3.1                                                                               | 4.1                                                                               |                                                                                   |   |      |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s     | 7.0                                                                               | 33.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 40.0                                                                              |   | 5.2  |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+l1), s | 2.7                                                                               | 5.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.6                                                                               |   | 2.7  |
| Green Ext Time (p_c), s      | 0.0                                                                               | 8.1                                                                               |                                                                                   |                                                                                   |                                                                                   | 8.6                                                                               |   | 0.0  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

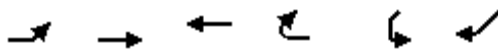
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|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 48                                                                                | 194                                                                               | 137                                                                               | 151                                                                               | 897                                                                               | 136                                                                               | 323                                                                                | 1027                                                                                | 40                                                                                  | 84                                                                                  | 900                                                                                 | 47                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1792                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1810                                                                               | 1810                                                                                | 1900                                                                                | 1792                                                                                | 1792                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 54                                                                                | 217                                                                               | 153                                                                               | 169                                                                               | 1004                                                                              | 152                                                                               | 366                                                                                | 1162                                                                                | 45                                                                                  | 94                                                                                  | 1008                                                                                | 53                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 130                                                                               | 883                                                                               | 395                                                                               | 436                                                                               | 962                                                                               | 146                                                                               | 379                                                                                | 1488                                                                                | 58                                                                                  | 227                                                                                 | 1060                                                                                | 56                                                                                  |
| Arrive On Green              | 0.03                                                                              | 0.26                                                                              | 0.26                                                                              | 0.09                                                                              | 0.31                                                                              | 0.31                                                                              | 0.17                                                                               | 0.44                                                                                | 0.44                                                                                | 0.05                                                                                | 0.32                                                                                | 0.32                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 3406                                                                              | 1524                                                                              | 1774                                                                              | 3084                                                                              | 466                                                                               | 1723                                                                               | 3375                                                                                | 131                                                                                 | 1707                                                                                | 3292                                                                                | 173                                                                                 |
| Grp Volume(v), veh/h         | 54                                                                                | 217                                                                               | 153                                                                               | 169                                                                               | 576                                                                               | 580                                                                               | 366                                                                                | 592                                                                                 | 615                                                                                 | 94                                                                                  | 521                                                                                 | 540                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1524                                                                              | 1774                                                                              | 1770                                                                              | 1780                                                                              | 1723                                                                               | 1719                                                                                | 1786                                                                                | 1707                                                                                | 1703                                                                                | 1762                                                                                |
| Q Serve(g_s), s              | 2.3                                                                               | 5.0                                                                               | 8.2                                                                               | 6.6                                                                               | 31.0                                                                              | 31.0                                                                              | 16.0                                                                               | 29.1                                                                                | 29.2                                                                                | 3.6                                                                                 | 29.7                                                                                | 29.7                                                                                |
| Cycle Q Clear(g_c), s        | 2.3                                                                               | 5.0                                                                               | 8.2                                                                               | 6.6                                                                               | 31.0                                                                              | 31.0                                                                              | 16.0                                                                               | 29.1                                                                                | 29.2                                                                                | 3.6                                                                                 | 29.7                                                                                | 29.7                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                              | 1.00                                                                               |                                                                                     | 0.07                                                                                | 1.00                                                                                |                                                                                     | 0.10                                                                                |
| Lane Grp Cap(c), veh/h       | 130                                                                               | 883                                                                               | 395                                                                               | 436                                                                               | 552                                                                               | 556                                                                               | 379                                                                                | 758                                                                                 | 788                                                                                 | 227                                                                                 | 549                                                                                 | 568                                                                                 |
| V/C Ratio(X)                 | 0.42                                                                              | 0.25                                                                              | 0.39                                                                              | 0.39                                                                              | 1.04                                                                              | 1.04                                                                              | 0.97                                                                               | 0.78                                                                                | 0.78                                                                                | 0.41                                                                                | 0.95                                                                                | 0.95                                                                                |
| Avail Cap(c_a), veh/h        | 141                                                                               | 891                                                                               | 399                                                                               | 444                                                                               | 552                                                                               | 556                                                                               | 379                                                                                | 758                                                                                 | 788                                                                                 | 241                                                                                 | 549                                                                                 | 568                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 29.0                                                                              | 29.1                                                                              | 30.3                                                                              | 22.4                                                                              | 34.2                                                                              | 34.2                                                                              | 27.7                                                                               | 23.7                                                                                | 23.7                                                                                | 22.5                                                                                | 32.9                                                                                | 32.9                                                                                |
| Incr Delay (d2), s/veh       | 2.1                                                                               | 0.1                                                                               | 0.6                                                                               | 0.6                                                                               | 49.8                                                                              | 50.2                                                                              | 37.0                                                                               | 7.8                                                                                 | 7.6                                                                                 | 1.2                                                                                 | 27.9                                                                                | 27.4                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.2                                                                               | 2.4                                                                               | 3.5                                                                               | 3.3                                                                               | 22.7                                                                              | 22.9                                                                              | 13.9                                                                               | 15.5                                                                                | 16.0                                                                                | 1.7                                                                                 | 18.2                                                                                | 18.7                                                                                |
| LnGrp Delay(d),s/veh         | 31.1                                                                              | 29.2                                                                              | 30.9                                                                              | 22.9                                                                              | 84.0                                                                              | 84.4                                                                              | 64.7                                                                               | 31.5                                                                                | 31.3                                                                                | 23.7                                                                                | 60.8                                                                                | 60.2                                                                                |
| LnGrp LOS                    | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | F                                                                                 | F                                                                                 | E                                                                                  | C                                                                                   | C                                                                                   | C                                                                                   | E                                                                                   | E                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 424                                                                               |                                                                                   |                                                                                   | 1325                                                                              |                                                                                   |                                                                                    | 1573                                                                                |                                                                                     |                                                                                     | 1155                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 30.1                                                                              |                                                                                   |                                                                                   | 76.4                                                                              |                                                                                   |                                                                                    | 39.1                                                                                |                                                                                     |                                                                                     | 57.5                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.2                                                                               | 47.8                                                                              | 12.6                                                                              | 29.8                                                                              | 21.0                                                                              | 36.0                                                                              | 7.3                                                                                | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 43.0                                                                              | 9.0                                                                               | 26.0                                                                              | 17.0                                                                              | 32.0                                                                              | 4.0                                                                                | 31.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 5.6                                                                               | 31.2                                                                              | 8.6                                                                               | 10.2                                                                              | 18.0                                                                              | 31.7                                                                              | 4.3                                                                                | 33.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 9.2                                                                               | 0.0                                                                               | 8.0                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 54.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 8: SR 236/Hugh Howell Rd & Rosser Rd

6/22/2016



| Movement                     | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR  | SWL                                                                               | SWR  |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|---|------|
| Lane Configurations          |  |  |  |      |  |      |   |      |
| Volume (veh/h)               | 61                                                                                | 211                                                                               | 779                                                                               | 5    | 7                                                                                 | 423  |   |      |
| Number                       | 5                                                                                 | 2                                                                                 | 6                                                                                 | 16   | 3                                                                                 | 18   |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0    | 0                                                                                 | 0    |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   |                                                                                   | 1.00 | 1.00                                                                              | 1.00 |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00 |   |      |
| Adj Sat Flow, veh/h/ln       | 1845                                                                              | 1845                                                                              | 1863                                                                              | 1900 | 1881                                                                              | 1900 |   |      |
| Adj Flow Rate, veh/h         | 68                                                                                | 234                                                                               | 950                                                                               | 6    | 8                                                                                 | 510  |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0    | 0                                                                                 | 0    |   |      |
| Peak Hour Factor             | 0.90                                                                              | 0.90                                                                              | 0.82                                                                              | 0.82 | 0.83                                                                              | 0.83 |   |      |
| Percent Heavy Veh, %         | 3                                                                                 | 3                                                                                 | 2                                                                                 | 2    | 0                                                                                 | 0    |   |      |
| Cap, veh/h                   | 189                                                                               | 1165                                                                              | 1014                                                                              | 6    | 7                                                                                 | 435  |   |      |
| Arrive On Green              | 0.04                                                                              | 0.63                                                                              | 0.55                                                                              | 0.55 | 0.28                                                                              | 0.28 |   |      |
| Sat Flow, veh/h              | 1757                                                                              | 1845                                                                              | 1849                                                                              | 12   | 25                                                                                | 1574 |   |      |
| Grp Volume(v), veh/h         | 68                                                                                | 234                                                                               | 0                                                                                 | 956  | 519                                                                               | 0    |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1757                                                                              | 1845                                                                              | 0                                                                                 | 1861 | 1602                                                                              | 0    |   |      |
| Q Serve(g_s), s              | 1.4                                                                               | 4.6                                                                               | 0.0                                                                               | 41.4 | 24.0                                                                              | 0.0  |   |      |
| Cycle Q Clear(g_c), s        | 1.4                                                                               | 4.6                                                                               | 0.0                                                                               | 41.4 | 24.0                                                                              | 0.0  |   |      |
| Prop In Lane                 | 1.00                                                                              |                                                                                   |                                                                                   | 0.01 | 0.02                                                                              | 0.98 |   |      |
| Lane Grp Cap(c), veh/h       | 189                                                                               | 1165                                                                              | 0                                                                                 | 1020 | 443                                                                               | 0    |   |      |
| V/C Ratio(X)                 | 0.36                                                                              | 0.20                                                                              | 0.00                                                                              | 0.94 | 1.17                                                                              | 0.00 |   |      |
| Avail Cap(c_a), veh/h        | 205                                                                               | 1232                                                                              | 0                                                                                 | 1071 | 443                                                                               | 0    |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00 |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00 | 1.00                                                                              | 0.00 |   |      |
| Uniform Delay (d), s/veh     | 19.2                                                                              | 6.8                                                                               | 0.0                                                                               | 18.2 | 31.4                                                                              | 0.0  |   |      |
| Incr Delay (d2), s/veh       | 1.1                                                                               | 0.1                                                                               | 0.0                                                                               | 14.4 | 99.2                                                                              | 0.0  |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0  | 0.0                                                                               | 0.0  |   |      |
| %ile BackOfQ(50%),veh/ln     | 1.0                                                                               | 2.4                                                                               | 0.0                                                                               | 25.1 | 22.7                                                                              | 0.0  |   |      |
| LnGrp Delay(d),s/veh         | 20.4                                                                              | 6.8                                                                               | 0.0                                                                               | 32.6 | 130.7                                                                             | 0.0  |   |      |
| LnGrp LOS                    | C                                                                                 | A                                                                                 |                                                                                   | C    | F                                                                                 |      |   |      |
| Approach Vol, veh/h          |                                                                                   | 302                                                                               | 956                                                                               |      | 519                                                                               |      |   |      |
| Approach Delay, s/veh        |                                                                                   | 9.9                                                                               | 32.6                                                                              |      | 130.7                                                                             |      |   |      |
| Approach LOS                 |                                                                                   | A                                                                                 | C                                                                                 |      | F                                                                                 |      |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4    | 5                                                                                 | 6    | 7 | 8    |
| Assigned Phs                 |                                                                                   | 2                                                                                 |                                                                                   |      | 5                                                                                 | 6    |   | 8    |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 58.9                                                                              |                                                                                   |      | 7.2                                                                               | 51.6 |   | 28.0 |
| Change Period (Y+Rc), s      |                                                                                   | 4.0                                                                               |                                                                                   |      | 4.0                                                                               | 4.0  |   | 4.0  |
| Max Green Setting (Gmax), s  |                                                                                   | 58.0                                                                              |                                                                                   |      | 4.0                                                                               | 50.0 |   | 24.0 |
| Max Q Clear Time (g_c+I1), s |                                                                                   | 6.6                                                                               |                                                                                   |      | 3.4                                                                               | 43.4 |   | 26.0 |
| Green Ext Time (p_c), s      |                                                                                   | 12.6                                                                              |                                                                                   |      | 0.0                                                                               | 4.2  |   | 0.0  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |      |                                                                                   |      |   |      |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 57.4                                                                              |      |                                                                                   |      |   |      |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | E                                                                                 |      |                                                                                   |      |   |      |
| Notes                        |                                                                                   |                                                                                   |                                                                                   |      |                                                                                   |      |   |      |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

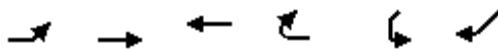
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| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |                                                                                   |   |    |                                                                                     |   |  |  |
| Volume (veh/h)               | 83                                                                                | 794                                                                               | 239                                                                               | 94                                                                                | 314                                                                               | 64                                                                                | 207                                                                                | 819                                                                                 | 119                                                                                 | 251                                                                                 | 1100                                                                                | 63                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1792                                                                               | 1792                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 93                                                                                | 889                                                                               | 268                                                                               | 105                                                                               | 352                                                                               | 72                                                                                | 232                                                                                | 917                                                                                 | 133                                                                                 | 281                                                                                 | 1232                                                                                | 71                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 6                                                                                  | 6                                                                                   | 6                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 312                                                                               | 905                                                                               | 405                                                                               | 161                                                                               | 712                                                                               | 144                                                                               | 282                                                                                | 1210                                                                                | 175                                                                                 | 355                                                                                 | 1396                                                                                | 80                                                                                  |
| Arrive On Green              | 0.05                                                                              | 0.26                                                                              | 0.26                                                                              | 0.04                                                                              | 0.25                                                                              | 0.25                                                                              | 0.10                                                                               | 0.41                                                                                | 0.41                                                                                | 0.12                                                                                | 0.42                                                                                | 0.42                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3539                                                                              | 1583                                                                              | 1757                                                                              | 2905                                                                              | 588                                                                               | 1707                                                                               | 2986                                                                                | 433                                                                                 | 1723                                                                                | 3305                                                                                | 190                                                                                 |
| Grp Volume(v), veh/h         | 93                                                                                | 889                                                                               | 268                                                                               | 105                                                                               | 211                                                                               | 213                                                                               | 232                                                                                | 523                                                                                 | 527                                                                                 | 281                                                                                 | 640                                                                                 | 663                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1583                                                                              | 1757                                                                              | 1752                                                                              | 1741                                                                              | 1707                                                                               | 1703                                                                                | 1716                                                                                | 1723                                                                                | 1719                                                                                | 1776                                                                                |
| Q Serve(g_s), s              | 3.5                                                                               | 22.5                                                                              | 13.6                                                                              | 4.0                                                                               | 9.3                                                                               | 9.5                                                                               | 7.0                                                                                | 23.7                                                                                | 23.7                                                                                | 8.4                                                                                 | 30.8                                                                                | 30.9                                                                                |
| Cycle Q Clear(g_c), s        | 3.5                                                                               | 22.5                                                                              | 13.6                                                                              | 4.0                                                                               | 9.3                                                                               | 9.5                                                                               | 7.0                                                                                | 23.7                                                                                | 23.7                                                                                | 8.4                                                                                 | 30.8                                                                                | 30.9                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 0.34                                                                              | 1.00                                                                               |                                                                                     | 0.25                                                                                | 1.00                                                                                |                                                                                     | 0.11                                                                                |
| Lane Grp Cap(c), veh/h       | 312                                                                               | 905                                                                               | 405                                                                               | 161                                                                               | 430                                                                               | 427                                                                               | 282                                                                                | 690                                                                                 | 695                                                                                 | 355                                                                                 | 726                                                                                 | 750                                                                                 |
| V/C Ratio(X)                 | 0.30                                                                              | 0.98                                                                              | 0.66                                                                              | 0.65                                                                              | 0.49                                                                              | 0.50                                                                              | 0.82                                                                               | 0.76                                                                                | 0.76                                                                                | 0.79                                                                                | 0.88                                                                                | 0.88                                                                                |
| Avail Cap(c_a), veh/h        | 313                                                                               | 905                                                                               | 405                                                                               | 161                                                                               | 430                                                                               | 427                                                                               | 283                                                                                | 690                                                                                 | 695                                                                                 | 383                                                                                 | 726                                                                                 | 750                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 23.8                                                                              | 33.3                                                                              | 30.0                                                                              | 27.1                                                                              | 29.1                                                                              | 29.2                                                                              | 19.7                                                                               | 23.0                                                                                | 23.0                                                                                | 18.0                                                                                | 23.9                                                                                | 24.0                                                                                |
| Incr Delay (d2), s/veh       | 0.5                                                                               | 25.6                                                                              | 4.0                                                                               | 9.0                                                                               | 0.9                                                                               | 0.9                                                                               | 17.5                                                                               | 7.6                                                                                 | 7.6                                                                                 | 10.1                                                                                | 14.5                                                                                | 14.3                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.7                                                                               | 14.2                                                                              | 6.4                                                                               | 2.3                                                                               | 4.6                                                                               | 4.7                                                                               | 4.6                                                                                | 12.5                                                                                | 12.6                                                                                | 4.9                                                                                 | 17.5                                                                                | 18.1                                                                                |
| LnGrp Delay(d),s/veh         | 24.3                                                                              | 58.9                                                                              | 34.0                                                                              | 36.1                                                                              | 30.0                                                                              | 30.1                                                                              | 37.1                                                                               | 30.6                                                                                | 30.5                                                                                | 28.1                                                                                | 38.4                                                                                | 38.3                                                                                |
| LnGrp LOS                    | C                                                                                 | E                                                                                 | C                                                                                 | D                                                                                 | C                                                                                 | C                                                                                 | D                                                                                  | C                                                                                   | C                                                                                   | C                                                                                   | D                                                                                   | D                                                                                   |
| Approach Vol, veh/h          | 1250                                                                              |                                                                                   |                                                                                   |                                                                                   | 529                                                                               |                                                                                   |                                                                                    | 1282                                                                                |                                                                                     |                                                                                     | 1584                                                                                |                                                                                     |
| Approach Delay, s/veh        | 51.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 31.3                                                                              |                                                                                   |                                                                                    | 31.7                                                                                |                                                                                     |                                                                                     | 36.5                                                                                |                                                                                     |
| Approach LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 14.5                                                                              | 40.5                                                                              | 8.0                                                                               | 27.0                                                                              | 13.0                                                                              | 42.0                                                                              | 8.9                                                                                | 26.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 12.0                                                                              | 35.0                                                                              | 4.0                                                                               | 23.0                                                                              | 9.0                                                                               | 38.0                                                                              | 5.0                                                                                | 22.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 10.4                                                                              | 25.7                                                                              | 6.0                                                                               | 24.5                                                                              | 9.0                                                                               | 32.9                                                                              | 5.5                                                                                | 11.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.1                                                                               | 7.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 4.4                                                                               | 0.0                                                                                | 6.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 38.5                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 8: SR 236/Hugh Howell Rd & Rosser Rd

6/22/2016



| Movement                     | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR  | SWL                                                                               | SWR  |   |      |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|---|------|
| Lane Configurations          |  |  |  |      |  |      |   |      |
| Volume (veh/h)               | 367                                                                               | 871                                                                               | 279                                                                               | 5    | 4                                                                                 | 142  |   |      |
| Number                       | 5                                                                                 | 2                                                                                 | 6                                                                                 | 16   | 3                                                                                 | 18   |   |      |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0    | 0                                                                                 | 0    |   |      |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   |                                                                                   | 1.00 | 1.00                                                                              | 1.00 |   |      |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00 |   |      |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1881                                                                              | 1845                                                                              | 1900 | 1881                                                                              | 1900 |   |      |
| Adj Flow Rate, veh/h         | 411                                                                               | 975                                                                               | 338                                                                               | 6    | 5                                                                                 | 161  |   |      |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0    | 0                                                                                 | 0    |   |      |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.85                                                                              | 0.85 | 0.91                                                                              | 0.91 |   |      |
| Percent Heavy Veh, %         | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3    | 0                                                                                 | 0    |   |      |
| Cap, veh/h                   | 736                                                                               | 1220                                                                              | 662                                                                               | 12   | 7                                                                                 | 240  |   |      |
| Arrive On Green              | 0.18                                                                              | 0.65                                                                              | 0.37                                                                              | 0.37 | 0.16                                                                              | 0.16 |   |      |
| Sat Flow, veh/h              | 1792                                                                              | 1881                                                                              | 1807                                                                              | 32   | 48                                                                                | 1548 |   |      |
| Grp Volume(v), veh/h         | 411                                                                               | 975                                                                               | 0                                                                                 | 344  | 167                                                                               | 0    |   |      |
| Grp Sat Flow(s),veh/h/ln     | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1839 | 1606                                                                              | 0    |   |      |
| Q Serve(g_s), s              | 4.9                                                                               | 15.4                                                                              | 0.0                                                                               | 5.9  | 4.0                                                                               | 0.0  |   |      |
| Cycle Q Clear(g_c), s        | 4.9                                                                               | 15.4                                                                              | 0.0                                                                               | 5.9  | 4.0                                                                               | 0.0  |   |      |
| Prop In Lane                 | 1.00                                                                              |                                                                                   |                                                                                   | 0.02 | 0.03                                                                              | 0.96 |   |      |
| Lane Grp Cap(c), veh/h       | 736                                                                               | 1220                                                                              | 0                                                                                 | 674  | 249                                                                               | 0    |   |      |
| V/C Ratio(X)                 | 0.56                                                                              | 0.80                                                                              | 0.00                                                                              | 0.51 | 0.67                                                                              | 0.00 |   |      |
| Avail Cap(c_a), veh/h        | 978                                                                               | 1661                                                                              | 0                                                                                 | 857  | 630                                                                               | 0    |   |      |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                              | 1.00 |   |      |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00 | 1.00                                                                              | 0.00 |   |      |
| Uniform Delay (d), s/veh     | 5.5                                                                               | 5.2                                                                               | 0.0                                                                               | 10.1 | 16.2                                                                              | 0.0  |   |      |
| Incr Delay (d2), s/veh       | 0.7                                                                               | 2.0                                                                               | 0.0                                                                               | 0.6  | 3.1                                                                               | 0.0  |   |      |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0  | 0.0                                                                               | 0.0  |   |      |
| %ile BackOfQ(50%),veh/ln     | 2.3                                                                               | 8.3                                                                               | 0.0                                                                               | 3.1  | 2.0                                                                               | 0.0  |   |      |
| LnGrp Delay(d),s/veh         | 6.2                                                                               | 7.3                                                                               | 0.0                                                                               | 10.7 | 19.3                                                                              | 0.0  |   |      |
| LnGrp LOS                    | A                                                                                 | A                                                                                 |                                                                                   | B    | B                                                                                 |      |   |      |
| Approach Vol, veh/h          |                                                                                   | 1386                                                                              | 344                                                                               |      | 167                                                                               |      |   |      |
| Approach Delay, s/veh        |                                                                                   | 6.9                                                                               | 10.7                                                                              |      | 19.3                                                                              |      |   |      |
| Approach LOS                 |                                                                                   | A                                                                                 | B                                                                                 |      | B                                                                                 |      |   |      |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4    | 5                                                                                 | 6    | 7 | 8    |
| Assigned Phs                 |                                                                                   | 2                                                                                 |                                                                                   |      | 5                                                                                 | 6    |   | 8    |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 30.4                                                                              |                                                                                   |      | 11.5                                                                              | 18.9 |   | 10.3 |
| Change Period (Y+Rc), s      |                                                                                   | 4.0                                                                               |                                                                                   |      | 4.0                                                                               | 4.0  |   | 4.0  |
| Max Green Setting (Gmax), s  |                                                                                   | 36.0                                                                              |                                                                                   |      | 13.0                                                                              | 19.0 |   | 16.0 |
| Max Q Clear Time (g_c+I1), s |                                                                                   | 17.4                                                                              |                                                                                   |      | 6.9                                                                               | 7.9  |   | 6.0  |
| Green Ext Time (p_c), s      |                                                                                   | 9.0                                                                               |                                                                                   |      | 0.7                                                                               | 6.5  |   | 0.3  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |      |                                                                                   |      |   |      |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 8.7                                                                               |      |                                                                                   |      |   |      |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |      |                                                                                   |      |   |      |
| Notes                        |                                                                                   |                                                                                   |                                                                                   |      |                                                                                   |      |   |      |

# HCM 2010 Signalized Intersection Summary

## 1: Mtn Indus Blvd & US 78 WB Off Ramp/US 78 WB On Ramp

6/22/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |  |  |  |                                                                                     |
| Volume (veh/h)                                                       | 664                                                                               | 0                                                                                 | 433                                                                               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1495                                                                                | 66                                                                                  | 131                                                                                 | 782                                                                                 | 0                                                                                   |
| Number                                                               | 7                                                                                 | 4                                                                                 | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1776                                                                              | 1776                                                                              | 1776                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1810                                                                                | 1810                                                                                | 1776                                                                                | 1776                                                                                | 0                                                                                   |
| Adj Flow Rate, veh/h                                                 | 743                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1674                                                                                | 0                                                                                   | 147                                                                                 | 876                                                                                 | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 3                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor                                                     | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                                 | 7                                                                                 | 7                                                                                 | 7                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5                                                                                   | 5                                                                                   | 7                                                                                   | 7                                                                                   | 0                                                                                   |
| Cap, veh/h                                                           | 901                                                                               | 0                                                                                 | 402                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2306                                                                                | 718                                                                                 | 287                                                                                 | 2025                                                                                | 0                                                                                   |
| Arrive On Green                                                      | 0.27                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.47                                                                                | 0.00                                                                                | 0.13                                                                                | 1.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3382                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5103                                                                                | 1538                                                                                | 1691                                                                                | 3463                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h                                                 | 743                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1674                                                                                | 0                                                                                   | 147                                                                                 | 876                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1691                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1647                                                                                | 1538                                                                                | 1691                                                                                | 1687                                                                                | 0                                                                                   |
| Q Serve(g_s), s                                                      | 12.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 16.4                                                                                | 0.0                                                                                 | 2.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 12.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 16.4                                                                                | 0.0                                                                                 | 2.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 901                                                                               | 0                                                                                 | 402                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2306                                                                                | 718                                                                                 | 287                                                                                 | 2025                                                                                | 0                                                                                   |
| V/C Ratio(X)                                                         | 0.82                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.73                                                                                | 0.00                                                                                | 0.51                                                                                | 0.43                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 1127                                                                              | 0                                                                                 | 503                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 2306                                                                                | 718                                                                                 | 287                                                                                 | 2025                                                                                | 0                                                                                   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 2.00                                                                                | 2.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 1.00                                                                                | 0.00                                                                                | 0.31                                                                                | 0.31                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 20.7                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 12.9                                                                                | 0.0                                                                                 | 10.6                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 4.1                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 2.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 6.3                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 7.7                                                                                 | 0.0                                                                                 | 1.2                                                                                 | 0.1                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 24.8                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 14.9                                                                                | 0.0                                                                                 | 11.0                                                                                | 0.2                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 743                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1674                                                                                |                                                                                     |                                                                                     | 1023                                                                                |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 24.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 14.9                                                                                |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Approach LOS                                                         |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             | 8.0                                                                               | 32.0                                                                              |                                                                                   | 20.0                                                                              |                                                                                   | 40.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          | 4.0                                                                               | 24.0                                                                              |                                                                                   | 20.0                                                                              |                                                                                   | 32.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         | 4.5                                                                               | 18.4                                                                              |                                                                                   | 14.4                                                                              |                                                                                   | 2.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              | 0.0                                                                               | 5.1                                                                               |                                                                                   | 1.6                                                                               |                                                                                   | 21.9                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |                                                                                   |                                                                                   |  |                                                                                   |  |  |  |                                                                                     |                                                                                     |  |  |
| Volume (veh/h)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 106                                                                               | 0                                                                                 | 556                                                                               | 351                                                                                 | 1954                                                                                | 0                                                                                   | 0                                                                                   | 774                                                                                 | 897                                                                                 |
| Number                       |                                                                                   |                                                                                   |                                                                                   | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          |                                                                                   |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       |                                                                                   |                                                                                   |                                                                                   | 1937                                                                              | 0                                                                                 | 1863                                                                              | 1792                                                                                | 1792                                                                                | 0                                                                                   | 0                                                                                   | 1776                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         |                                                                                   |                                                                                   |                                                                                   | 119                                                                               | 0                                                                                 | 622                                                                               | 393                                                                                 | 2188                                                                                | 0                                                                                   | 0                                                                                   | 867                                                                                 | 0                                                                                   |
| Adj No. of Lanes             |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   | 0                                                                                   | 0                                                                                   | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor             |                                                                                   |                                                                                   |                                                                                   | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 | 0                                                                                 | 2                                                                                 | 6                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 7                                                                                   | 7                                                                                   |
| Cap, veh/h                   |                                                                                   |                                                                                   |                                                                                   | 523                                                                               | 0                                                                                 | 449                                                                               | 516                                                                                 | 1987                                                                                | 0                                                                                   | 0                                                                                   | 1777                                                                                | 0                                                                                   |
| Arrive On Green              |                                                                                   |                                                                                   |                                                                                   | 0.28                                                                              | 0.00                                                                              | 0.28                                                                              | 0.15                                                                                | 0.58                                                                                | 0.00                                                                                | 0.00                                                                                | 0.37                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              |                                                                                   |                                                                                   |                                                                                   | 1845                                                                              | 0                                                                                 | 1583                                                                              | 1707                                                                                | 3495                                                                                | 0                                                                                   | 0                                                                                   | 5167                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         |                                                                                   |                                                                                   |                                                                                   | 119                                                                               | 0                                                                                 | 622                                                                               | 393                                                                                 | 2188                                                                                | 0                                                                                   | 0                                                                                   | 867                                                                                 | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     |                                                                                   |                                                                                   |                                                                                   | 1845                                                                              | 0                                                                                 | 1583                                                                              | 1707                                                                                | 1703                                                                                | 0                                                                                   | 0                                                                                   | 1616                                                                                | 0                                                                                   |
| Q Serve(g_s), s              |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 0.0                                                                               | 17.0                                                                              | 8.1                                                                                 | 35.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 8.3                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 0.0                                                                               | 17.0                                                                              | 8.1                                                                                 | 35.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 8.3                                                                                 | 0.0                                                                                 |
| Prop In Lane                 |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 0.00                                                                                | 0.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       |                                                                                   |                                                                                   |                                                                                   | 523                                                                               | 0                                                                                 | 449                                                                               | 516                                                                                 | 1987                                                                                | 0                                                                                   | 0                                                                                   | 1777                                                                                | 0                                                                                   |
| V/C Ratio(X)                 |                                                                                   |                                                                                   |                                                                                   | 0.23                                                                              | 0.00                                                                              | 1.39                                                                              | 0.76                                                                                | 1.10                                                                                | 0.00                                                                                | 0.00                                                                                | 0.49                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        |                                                                                   |                                                                                   |                                                                                   | 523                                                                               | 0                                                                                 | 449                                                                               | 516                                                                                 | 1987                                                                                | 0                                                                                   | 0                                                                                   | 1777                                                                                | 0                                                                                   |
| HCM Platoon Ratio            |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.51                                                                                | 0.51                                                                                | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     |                                                                                   |                                                                                   |                                                                                   | 16.5                                                                              | 0.0                                                                               | 21.5                                                                              | 10.2                                                                                | 12.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 14.7                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       |                                                                                   |                                                                                   |                                                                                   | 0.2                                                                               | 0.0                                                                               | 187.3                                                                             | 3.4                                                                                 | 50.2                                                                                | 0.0                                                                                 | 0.0                                                                                 | 1.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     |                                                                                   |                                                                                   |                                                                                   | 1.5                                                                               | 0.0                                                                               | 30.7                                                                              | 4.1                                                                                 | 29.8                                                                                | 0.0                                                                                 | 0.0                                                                                 | 3.9                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         |                                                                                   |                                                                                   |                                                                                   | 16.7                                                                              | 0.0                                                                               | 208.8                                                                             | 13.7                                                                                | 62.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 15.6                                                                                | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   | F                                                                                 | B                                                                                   | F                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 741                                                                               |                                                                                   |                                                                                     | 2581                                                                                |                                                                                     |                                                                                     | 867                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 177.9                                                                             |                                                                                   |                                                                                     | 55.2                                                                                |                                                                                     |                                                                                     | 15.6                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                     | E                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 39.0                                                                              |                                                                                   |                                                                                   | 13.0                                                                              | 26.0                                                                              |                                                                                     | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   | 9.0                                                                               | 22.0                                                                              |                                                                                     | 17.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 10.1                                                                              | 10.3                                                                              |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 11.0                                                                              |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 68.7                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 64                                                                                | 259                                                                               | 141                                                                               | 357                                                                               | 998                                                                               | 155                                                                               | 333                                                                                | 1104                                                                                | 255                                                                                 | 107                                                                                 | 974                                                                                 | 67                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1810                                                                               | 1810                                                                                | 1900                                                                                | 1792                                                                                | 1792                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 70                                                                                | 282                                                                               | 153                                                                               | 388                                                                               | 1085                                                                              | 0                                                                                 | 366                                                                                | 1213                                                                                | 280                                                                                 | 116                                                                                 | 1059                                                                                | 73                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 133                                                                               | 357                                                                               | 189                                                                               | 440                                                                               | 1156                                                                              | 0                                                                                 | 366                                                                                | 1288                                                                                | 294                                                                                 | 146                                                                                 | 1061                                                                                | 73                                                                                  |
| Arrive On Green              | 0.03                                                                              | 0.17                                                                              | 0.17                                                                              | 0.19                                                                              | 0.33                                                                              | 0.00                                                                              | 0.18                                                                               | 0.46                                                                                | 0.46                                                                                | 0.04                                                                                | 0.33                                                                                | 0.33                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 2156                                                                              | 1138                                                                              | 1774                                                                              | 3632                                                                              | 0                                                                                 | 1723                                                                               | 2781                                                                                | 635                                                                                 | 1707                                                                                | 3233                                                                                | 223                                                                                 |
| Grp Volume(v), veh/h         | 70                                                                                | 221                                                                               | 214                                                                               | 388                                                                               | 1085                                                                              | 0                                                                                 | 366                                                                                | 745                                                                                 | 748                                                                                 | 116                                                                                 | 558                                                                                 | 574                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1592                                                                              | 1774                                                                              | 1770                                                                              | 0                                                                                 | 1723                                                                               | 1719                                                                                | 1697                                                                                | 1707                                                                                | 1703                                                                                | 1753                                                                                |
| Q Serve(g_s), s              | 4.0                                                                               | 14.8                                                                              | 15.4                                                                              | 20.7                                                                              | 35.4                                                                              | 0.0                                                                               | 21.0                                                                               | 48.8                                                                                | 50.3                                                                                | 5.0                                                                                 | 38.9                                                                                | 38.9                                                                                |
| Cycle Q Clear(g_c), s        | 4.0                                                                               | 14.8                                                                              | 15.4                                                                              | 20.7                                                                              | 35.4                                                                              | 0.0                                                                               | 21.0                                                                               | 48.8                                                                                | 50.3                                                                                | 5.0                                                                                 | 38.9                                                                                | 38.9                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.72                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                               |                                                                                     | 0.37                                                                                | 1.00                                                                                |                                                                                     | 0.13                                                                                |
| Lane Grp Cap(c), veh/h       | 133                                                                               | 282                                                                               | 264                                                                               | 440                                                                               | 1156                                                                              | 0                                                                                 | 366                                                                                | 796                                                                                 | 786                                                                                 | 146                                                                                 | 559                                                                                 | 575                                                                                 |
| V/C Ratio(X)                 | 0.53                                                                              | 0.78                                                                              | 0.81                                                                              | 0.88                                                                              | 0.94                                                                              | 0.00                                                                              | 1.00                                                                               | 0.94                                                                                | 0.95                                                                                | 0.80                                                                                | 1.00                                                                                | 1.00                                                                                |
| Avail Cap(c_a), veh/h        | 133                                                                               | 282                                                                               | 264                                                                               | 483                                                                               | 1192                                                                              | 0                                                                                 | 366                                                                                | 796                                                                                 | 786                                                                                 | 146                                                                                 | 559                                                                                 | 575                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 41.3                                                                              | 47.5                                                                              | 47.8                                                                              | 31.3                                                                              | 38.8                                                                              | 0.0                                                                               | 37.7                                                                               | 30.2                                                                                | 30.7                                                                                | 33.4                                                                                | 39.9                                                                                | 39.9                                                                                |
| Incr Delay (d2), s/veh       | 3.9                                                                               | 13.4                                                                              | 17.2                                                                              | 16.1                                                                              | 13.7                                                                              | 0.0                                                                               | 47.3                                                                               | 19.6                                                                                | 22.4                                                                                | 25.6                                                                                | 37.5                                                                                | 37.1                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.5                                                                               | 8.0                                                                               | 8.0                                                                               | 12.1                                                                              | 19.4                                                                              | 0.0                                                                               | 16.7                                                                               | 27.3                                                                                | 28.4                                                                                | 2.5                                                                                 | 23.9                                                                                | 24.6                                                                                |
| LnGrp Delay(d),s/veh         | 45.1                                                                              | 60.9                                                                              | 64.9                                                                              | 47.4                                                                              | 52.5                                                                              | 0.0                                                                               | 85.0                                                                               | 49.8                                                                                | 53.1                                                                                | 59.1                                                                                | 77.3                                                                                | 76.9                                                                                |
| LnGrp LOS                    | D                                                                                 | E                                                                                 | E                                                                                 | D                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | D                                                                                   | D                                                                                   | E                                                                                   | E                                                                                   | E                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 505                                                                               |                                                                                   |                                                                                   | 1473                                                                              |                                                                                   |                                                                                    | 1859                                                                                |                                                                                     |                                                                                     | 1248                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 60.4                                                                              |                                                                                   |                                                                                   | 51.2                                                                              |                                                                                   |                                                                                    | 58.1                                                                                |                                                                                     |                                                                                     | 75.5                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 59.0                                                                              | 27.1                                                                              | 23.7                                                                              | 25.0                                                                              | 43.0                                                                              | 8.0                                                                                | 42.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 55.0                                                                              | 26.0                                                                              | 18.0                                                                              | 21.0                                                                              | 39.0                                                                              | 4.0                                                                                | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 7.0                                                                               | 52.3                                                                              | 22.7                                                                              | 17.4                                                                              | 23.0                                                                              | 40.9                                                                              | 6.0                                                                                | 37.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 2.5                                                                               | 0.4                                                                               | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 1.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 60.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 4: Mtn Indus. Blvd./Jimmy Carter Blvd & US 29/L'Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|--|--|--|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |  |  |  |  |  |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |  |  |
| Volume (veh/h)               | 124                                                                               | 368                                                                               | 25                                                                                | 632                                                                               | 1365                                                                              | 302                                                                               | 45                                                                                  | 689                                                                                 | 214                                                                                 | 131                                                                                 | 660                                                                                 | 235                                                                                 |  |  |  |  |  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |  |  |  |  |  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |  |  |  |  |  |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |  |  |  |  |  |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |  |  |  |  |  |
| Adj Sat Flow, veh/h/ln       | 1827                                                                              | 1827                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1743                                                                                | 1743                                                                                | 1743                                                                                | 1776                                                                                | 1776                                                                                | 1776                                                                                |  |  |  |  |  |
| Adj Flow Rate, veh/h         | 139                                                                               | 413                                                                               | 28                                                                                | 687                                                                               | 1484                                                                              | 328                                                                               | 54                                                                                  | 820                                                                                 | 0                                                                                   | 142                                                                                 | 717                                                                                 | 0                                                                                   |  |  |  |  |  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |  |  |  |  |  |
| Peak Hour Factor             | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.84                                                                                | 0.84                                                                                | 0.84                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |  |  |  |  |  |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 9                                                                                   | 9                                                                                   | 9                                                                                   | 7                                                                                   | 7                                                                                   | 7                                                                                   |  |  |  |  |  |
| Cap, veh/h                   | 159                                                                               | 758                                                                               | 51                                                                                | 742                                                                               | 1434                                                                              | 309                                                                               | 183                                                                                 | 828                                                                                 | 370                                                                                 | 159                                                                                 | 1147                                                                                | 513                                                                                 |  |  |  |  |  |
| Arrive On Green              | 0.05                                                                              | 0.23                                                                              | 0.23                                                                              | 0.31                                                                              | 0.49                                                                              | 0.49                                                                              | 0.25                                                                                | 0.25                                                                                | 0.00                                                                                | 0.05                                                                                | 0.34                                                                                | 0.00                                                                                |  |  |  |  |  |
| Sat Flow, veh/h              | 1740                                                                              | 3300                                                                              | 223                                                                               | 1792                                                                              | 2927                                                                              | 630                                                                               | 684                                                                                 | 3312                                                                                | 1482                                                                                | 1691                                                                                | 3374                                                                                | 1509                                                                                |  |  |  |  |  |
| Grp Volume(v), veh/h         | 139                                                                               | 217                                                                               | 224                                                                               | 687                                                                               | 890                                                                               | 922                                                                               | 54                                                                                  | 820                                                                                 | 0                                                                                   | 142                                                                                 | 717                                                                                 | 0                                                                                   |  |  |  |  |  |
| Grp Sat Flow(s),veh/h/ln     | 1740                                                                              | 1736                                                                              | 1788                                                                              | 1792                                                                              | 1787                                                                              | 1770                                                                              | 684                                                                                 | 1656                                                                                | 1482                                                                                | 1691                                                                                | 1687                                                                                | 1509                                                                                |  |  |  |  |  |
| Q Serve(g_s), s              | 5.0                                                                               | 11.0                                                                              | 11.1                                                                              | 27.4                                                                              | 49.0                                                                              | 49.0                                                                              | 7.2                                                                                 | 24.7                                                                                | 0.0                                                                                 | 5.0                                                                                 | 17.8                                                                                | 0.0                                                                                 |  |  |  |  |  |
| Cycle Q Clear(g_c), s        | 5.0                                                                               | 11.0                                                                              | 11.1                                                                              | 27.4                                                                              | 49.0                                                                              | 49.0                                                                              | 16.0                                                                                | 24.7                                                                                | 0.0                                                                                 | 5.0                                                                                 | 17.8                                                                                | 0.0                                                                                 |  |  |  |  |  |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.12                                                                              | 1.00                                                                              |                                                                                   | 0.36                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |  |  |  |  |  |
| Lane Grp Cap(c), veh/h       | 159                                                                               | 398                                                                               | 410                                                                               | 742                                                                               | 876                                                                               | 867                                                                               | 183                                                                                 | 828                                                                                 | 370                                                                                 | 159                                                                                 | 1147                                                                                | 513                                                                                 |  |  |  |  |  |
| V/C Ratio(X)                 | 0.87                                                                              | 0.54                                                                              | 0.55                                                                              | 0.93                                                                              | 1.02                                                                              | 1.06                                                                              | 0.30                                                                                | 0.99                                                                                | 0.00                                                                                | 0.90                                                                                | 0.63                                                                                | 0.00                                                                                |  |  |  |  |  |
| Avail Cap(c_a), veh/h        | 159                                                                               | 398                                                                               | 410                                                                               | 866                                                                               | 876                                                                               | 867                                                                               | 183                                                                                 | 828                                                                                 | 370                                                                                 | 159                                                                                 | 1147                                                                                | 513                                                                                 |  |  |  |  |  |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |  |  |  |  |  |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |  |  |  |  |  |
| Uniform Delay (d), s/veh     | 34.1                                                                              | 33.9                                                                              | 33.9                                                                              | 17.8                                                                              | 25.5                                                                              | 25.5                                                                              | 38.1                                                                                | 37.4                                                                                | 0.0                                                                                 | 32.4                                                                                | 27.7                                                                                | 0.0                                                                                 |  |  |  |  |  |
| Incr Delay (d2), s/veh       | 37.9                                                                              | 1.5                                                                               | 1.5                                                                               | 14.4                                                                              | 34.6                                                                              | 48.7                                                                              | 4.1                                                                                 | 29.0                                                                                | 0.0                                                                                 | 42.6                                                                                | 2.6                                                                                 | 0.0                                                                                 |  |  |  |  |  |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |  |  |  |  |  |
| %ile BackOfQ(50%),veh/ln     | 3.1                                                                               | 5.4                                                                               | 5.7                                                                               | 16.1                                                                              | 32.5                                                                              | 35.6                                                                              | 1.6                                                                                 | 14.6                                                                                | 0.0                                                                                 | 3.5                                                                                 | 8.7                                                                                 | 0.0                                                                                 |  |  |  |  |  |
| LnGrp Delay(d),s/veh         | 71.9                                                                              | 35.4                                                                              | 35.5                                                                              | 32.2                                                                              | 60.1                                                                              | 74.2                                                                              | 42.2                                                                                | 66.4                                                                                | 0.0                                                                                 | 75.1                                                                                | 30.2                                                                                | 0.0                                                                                 |  |  |  |  |  |
| LnGrp LOS                    | E                                                                                 | D                                                                                 | D                                                                                 | C                                                                                 | F                                                                                 | F                                                                                 | D                                                                                   | E                                                                                   |                                                                                     | E                                                                                   | C                                                                                   |                                                                                     |  |  |  |  |  |
| Approach Vol, veh/h          | 580                                                                               |                                                                                   |                                                                                   | 2499                                                                              |                                                                                   |                                                                                   | 874                                                                                 |                                                                                     |                                                                                     | 859                                                                                 |                                                                                     |                                                                                     |  |  |  |  |  |
| Approach Delay, s/veh        | 44.2                                                                              |                                                                                   |                                                                                   | 57.6                                                                              |                                                                                   |                                                                                   | 64.9                                                                                |                                                                                     |                                                                                     | 37.6                                                                                |                                                                                     |                                                                                     |  |  |  |  |  |
| Approach LOS                 | D                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | E                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |  |  |  |  |  |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 6                                                                                   | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 29.0                                                                              | 35.0                                                                              | 27.0                                                                              |                                                                                   |                                                                                   | 38.0                                                                                | 9.0                                                                                 | 53.0                                                                                |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 25.0                                                                              | 38.0                                                                              | 16.0                                                                              |                                                                                   |                                                                                   | 34.0                                                                                | 5.0                                                                                 | 49.0                                                                                |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Max Q Clear Time (g_c+l1), s | 7.0                                                                               | 26.7                                                                              | 29.4                                                                              | 13.1                                                                              |                                                                                   |                                                                                   | 19.8                                                                                | 7.0                                                                                 | 51.0                                                                                |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               | 1.7                                                                               | 2.7                                                                               |                                                                                   |                                                                                   | 8.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| HCM 2010 Ctrl Delay          | 53.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |  |

# HCM 2010 Signalized Intersection Summary

## 5: US 29/L'Ville Hwy & SR 236/ Hugh Howell Rd

6/22/2016

|                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                           | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                |  |  |                                                                                   |  |  |  |                                                                                    |  |                                                                                     |  |  |  |
| Volume (veh/h)                                                     | 324                                                                               | 262                                                                               | 7                                                                                 | 2                                                                                 | 747                                                                               | 963                                                                               | 7                                                                                  | 14                                                                                  | 7                                                                                   | 233                                                                                 | 8                                                                                   | 631                                                                                 |
| Number                                                             | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                             | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1845                                                                                | 1845                                                                                | 1845                                                                                |
| Adj Flow Rate, veh/h                                               | 364                                                                               | 294                                                                               | 8                                                                                 | 2                                                                                 | 812                                                                               | 0                                                                                 | 8                                                                                  | 16                                                                                  | 8                                                                                   | 288                                                                                 | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes                                                   | 2                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Peak Hour Factor                                                   | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                               | 0.88                                                                                | 0.88                                                                                | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                |
| Percent Heavy Veh, %                                               | 6                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                                                         | 405                                                                               | 1806                                                                              | 49                                                                                | 470                                                                               | 1285                                                                              | 575                                                                               | 20                                                                                 | 40                                                                                  | 20                                                                                  | 1015                                                                                | 0                                                                                   | 453                                                                                 |
| Arrive On Green                                                    | 0.12                                                                              | 0.53                                                                              | 0.53                                                                              | 0.37                                                                              | 0.37                                                                              | 0.00                                                                              | 0.04                                                                               | 0.04                                                                                | 0.04                                                                                | 0.29                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                    | 3312                                                                              | 3387                                                                              | 92                                                                                | 1062                                                                              | 3505                                                                              | 1568                                                                              | 445                                                                                | 890                                                                                 | 445                                                                                 | 3514                                                                                | 0                                                                                   | 1568                                                                                |
| Grp Volume(v), veh/h                                               | 364                                                                               | 147                                                                               | 155                                                                               | 2                                                                                 | 812                                                                               | 0                                                                                 | 32                                                                                 | 0                                                                                   | 0                                                                                   | 288                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                           | 1656                                                                              | 1703                                                                              | 1776                                                                              | 1062                                                                              | 1752                                                                              | 1568                                                                              | 1780                                                                               | 0                                                                                   | 0                                                                                   | 1757                                                                                | 0                                                                                   | 1568                                                                                |
| Q Serve(g_s), s                                                    | 9.8                                                                               | 4.0                                                                               | 4.0                                                                               | 0.1                                                                               | 17.2                                                                              | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 5.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                              | 9.8                                                                               | 4.0                                                                               | 4.0                                                                               | 0.1                                                                               | 17.2                                                                              | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 5.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                                                       | 1.00                                                                              |                                                                                   | 0.05                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.25                                                                               |                                                                                     | 0.25                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h                                             | 405                                                                               | 908                                                                               | 947                                                                               | 470                                                                               | 1285                                                                              | 575                                                                               | 79                                                                                 | 0                                                                                   | 0                                                                                   | 1015                                                                                | 0                                                                                   | 453                                                                                 |
| V/C Ratio(X)                                                       | 0.90                                                                              | 0.16                                                                              | 0.16                                                                              | 0.00                                                                              | 0.63                                                                              | 0.00                                                                              | 0.40                                                                               | 0.00                                                                                | 0.00                                                                                | 0.28                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                              | 405                                                                               | 908                                                                               | 947                                                                               | 470                                                                               | 1285                                                                              | 575                                                                               | 79                                                                                 | 0                                                                                   | 0                                                                                   | 1015                                                                                | 0                                                                                   | 453                                                                                 |
| HCM Platoon Ratio                                                  | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                           | 39.0                                                                              | 10.7                                                                              | 10.7                                                                              | 18.1                                                                              | 23.5                                                                              | 0.0                                                                               | 41.8                                                                               | 0.0                                                                                 | 0.0                                                                                 | 24.8                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                             | 25.4                                                                              | 0.4                                                                               | 0.4                                                                               | 0.0                                                                               | 2.4                                                                               | 0.0                                                                               | 14.6                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.7                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                          | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                           | 5.9                                                                               | 1.9                                                                               | 2.0                                                                               | 0.0                                                                               | 8.7                                                                               | 0.0                                                                               | 1.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.9                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                               | 64.4                                                                              | 11.1                                                                              | 11.1                                                                              | 18.1                                                                              | 25.9                                                                              | 0.0                                                                               | 56.5                                                                               | 0.0                                                                                 | 0.0                                                                                 | 25.5                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                          | E                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 |                                                                                   | E                                                                                  |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h                                                |                                                                                   | 666                                                                               |                                                                                   |                                                                                   | 814                                                                               |                                                                                   |                                                                                    | 32                                                                                  |                                                                                     |                                                                                     | 288                                                                                 |                                                                                     |
| Approach Delay, s/veh                                              |                                                                                   | 40.2                                                                              |                                                                                   |                                                                                   | 25.8                                                                              |                                                                                   |                                                                                    | 56.5                                                                                |                                                                                     |                                                                                     | 25.5                                                                                |                                                                                     |
| Approach LOS                                                       |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                                                              | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                       |                                                                                   | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                           |                                                                                   | 52.0                                                                              |                                                                                   | 8.0                                                                               | 15.0                                                                              | 37.0                                                                              |                                                                                    | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                            |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                        |                                                                                   | 48.0                                                                              |                                                                                   | 4.0                                                                               | 11.0                                                                              | 33.0                                                                              |                                                                                    | 26.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                       |                                                                                   | 6.0                                                                               |                                                                                   | 3.6                                                                               | 11.8                                                                              | 19.2                                                                              |                                                                                    | 7.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                            |                                                                                   | 8.3                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 5.7                                                                               |                                                                                    | 0.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                |                                                                                   |                                                                                   | 31.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                       |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved pedestrian interval to be less than phase max green. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

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User approved volume balancing among the lanes for turning movement.

# HCM 2010 Signalized Intersection Summary

## 36: Flintstone Dr/Site Drive #2

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |  |                                                                                    |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 161                                                                               | 277                                                                               | 31                                                                                | 86                                                                                | 1279                                                                              | 26                                                                                | 11                                                                                 | 0                                                                                   | 9                                                                                   | 21                                                                                  | 0                                                                                   | 161                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1810                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              | 1863                                                                              | 1900                                                                               | 1810                                                                                | 1900                                                                                | 1863                                                                                | 1863                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 175                                                                               | 301                                                                               | 34                                                                                | 93                                                                                | 1390                                                                              | 0                                                                                 | 12                                                                                 | 0                                                                                   | 10                                                                                  | 23                                                                                  | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                               | 0.92                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 5                                                                                 | 5                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 412                                                                               | 1742                                                                              | 195                                                                               | 820                                                                               | 1927                                                                              | 853                                                                               | 185                                                                                | 24                                                                                  | 65                                                                                  | 307                                                                                 | 176                                                                                 | 0                                                                                   |
| Arrive On Green              | 0.08                                                                              | 0.56                                                                              | 0.56                                                                              | 0.06                                                                              | 0.54                                                                              | 0.00                                                                              | 0.09                                                                               | 0.00                                                                                | 0.09                                                                                | 0.09                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3118                                                                              | 349                                                                               | 1792                                                                              | 3574                                                                              | 1583                                                                              | 568                                                                                | 254                                                                                 | 685                                                                                 | 1399                                                                                | 1863                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         | 175                                                                               | 165                                                                               | 170                                                                               | 93                                                                                | 1390                                                                              | 0                                                                                 | 22                                                                                 | 0                                                                                   | 0                                                                                   | 23                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1719                                                                              | 1748                                                                              | 1792                                                                              | 1787                                                                              | 1583                                                                              | 1507                                                                               | 0                                                                                   | 0                                                                                   | 1399                                                                                | 1863                                                                                | 0                                                                                   |
| Q Serve(g_s), s              | 1.8                                                                               | 2.0                                                                               | 2.0                                                                               | 0.9                                                                               | 12.4                                                                              | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 1.8                                                                               | 2.0                                                                               | 2.0                                                                               | 0.9                                                                               | 12.4                                                                              | 0.0                                                                               | 0.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.20                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.55                                                                               |                                                                                     | 0.45                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       | 412                                                                               | 960                                                                               | 976                                                                               | 820                                                                               | 1927                                                                              | 853                                                                               | 274                                                                                | 0                                                                                   | 0                                                                                   | 307                                                                                 | 176                                                                                 | 0                                                                                   |
| V/C Ratio(X)                 | 0.42                                                                              | 0.17                                                                              | 0.17                                                                              | 0.11                                                                              | 0.72                                                                              | 0.00                                                                              | 0.08                                                                               | 0.00                                                                                | 0.00                                                                                | 0.07                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 475                                                                               | 1139                                                                              | 1158                                                                              | 877                                                                               | 2283                                                                              | 1011                                                                              | 684                                                                                | 0                                                                                   | 0                                                                                   | 704                                                                                 | 705                                                                                 | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 6.7                                                                               | 4.6                                                                               | 4.6                                                                               | 3.6                                                                               | 7.4                                                                               | 0.0                                                                               | 17.6                                                                               | 0.0                                                                                 | 0.0                                                                                 | 17.6                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.7                                                                               | 0.1                                                                               | 0.1                                                                               | 0.1                                                                               | 0.9                                                                               | 0.0                                                                               | 0.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.1                                                                               | 0.9                                                                               | 1.0                                                                               | 0.5                                                                               | 6.2                                                                               | 0.0                                                                               | 0.2                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.3                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 7.4                                                                               | 4.6                                                                               | 4.6                                                                               | 3.6                                                                               | 8.3                                                                               | 0.0                                                                               | 17.7                                                                               | 0.0                                                                                 | 0.0                                                                                 | 17.7                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 510                                                                               |                                                                                   |                                                                                   | 1483                                                                              |                                                                                   |                                                                                    | 22                                                                                  |                                                                                     |                                                                                     | 23                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 5.6                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 17.7                                                                                |                                                                                     |                                                                                     | 17.7                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                   | 2                                                                                 | 3                                                                                 | 4                                                                                 |                                                                                   | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                   | 8.0                                                                               | 6.7                                                                               | 27.6                                                                              |                                                                                   | 8.0                                                                               | 7.5                                                                                | 26.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                   | 16.0                                                                              | 4.0                                                                               | 28.0                                                                              |                                                                                   | 16.0                                                                              | 5.0                                                                                | 27.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                   | 2.5                                                                               | 2.9                                                                               | 4.0                                                                               |                                                                                   | 2.5                                                                               | 3.8                                                                                | 14.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                   | 0.1                                                                               | 0.0                                                                               | 12.8                                                                              |                                                                                   | 0.1                                                                               | 0.1                                                                                | 8.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 7: SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)               | 2                                                                                 | 281                                                                               | 12                                                                                | 5                                                                                 | 1256                                                                              | 3                                                                                 | 74                                                                                 | 0                                                                                   | 10                                                                                  | 5                                                                                   | 0                                                                                   | 25                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1810                                                                              | 1810                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1900                                                                                | 1845                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 2                                                                                 | 305                                                                               | 0                                                                                 | 5                                                                                 | 1365                                                                              | 0                                                                                 | 89                                                                                 | 0                                                                                   | 12                                                                                  | 7                                                                                   | 0                                                                                   | 34                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.83                                                                               | 0.83                                                                                | 0.83                                                                                | 0.73                                                                                | 0.73                                                                                | 0.73                                                                                |
| Percent Heavy Veh, %         | 5                                                                                 | 5                                                                                 | 5                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   | 160                                                                               | 1425                                                                              | 0                                                                                 | 879                                                                               | 1473                                                                              | 0                                                                                 | 183                                                                                | 0                                                                                   | 15                                                                                  | 55                                                                                  | 12                                                                                  | 117                                                                                 |
| Arrive On Green              | 0.00                                                                              | 0.79                                                                              | 0.00                                                                              | 0.01                                                                              | 0.79                                                                              | 0.00                                                                              | 0.09                                                                               | 0.00                                                                                | 0.09                                                                                | 0.09                                                                                | 0.00                                                                                | 0.09                                                                                |
| Sat Flow, veh/h              | 1723                                                                              | 1810                                                                              | 0                                                                                 | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1336                                                                               | 0                                                                                   | 180                                                                                 | 142                                                                                 | 138                                                                                 | 1361                                                                                |
| Grp Volume(v), veh/h         | 2                                                                                 | 305                                                                               | 0                                                                                 | 5                                                                                 | 1365                                                                              | 0                                                                                 | 101                                                                                | 0                                                                                   | 0                                                                                   | 41                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1723                                                                              | 1810                                                                              | 0                                                                                 | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1516                                                                               | 0                                                                                   | 0                                                                                   | 1642                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.0                                                                               | 4.3                                                                               | 0.0                                                                               | 0.1                                                                               | 56.8                                                                              | 0.0                                                                               | 3.9                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.0                                                                               | 4.3                                                                               | 0.0                                                                               | 0.1                                                                               | 56.8                                                                              | 0.0                                                                               | 6.3                                                                                | 0.0                                                                                 | 0.0                                                                                 | 2.4                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 0.88                                                                               |                                                                                     | 0.12                                                                                | 0.17                                                                                |                                                                                     | 0.83                                                                                |
| Lane Grp Cap(c), veh/h       | 160                                                                               | 1425                                                                              | 0                                                                                 | 879                                                                               | 1473                                                                              | 0                                                                                 | 199                                                                                | 0                                                                                   | 0                                                                                   | 183                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.01                                                                              | 0.21                                                                              | 0.00                                                                              | 0.01                                                                              | 0.93                                                                              | 0.00                                                                              | 0.51                                                                               | 0.00                                                                                | 0.00                                                                                | 0.22                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 226                                                                               | 1425                                                                              | 0                                                                                 | 941                                                                               | 1473                                                                              | 0                                                                                 | 305                                                                                | 0                                                                                   | 0                                                                                   | 300                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 18.4                                                                              | 2.7                                                                               | 0.0                                                                               | 2.2                                                                               | 8.1                                                                               | 0.0                                                                               | 44.1                                                                               | 0.0                                                                                 | 0.0                                                                                 | 42.5                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 11.5                                                                              | 0.0                                                                               | 2.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.6                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.0                                                                               | 2.3                                                                               | 0.0                                                                               | 0.0                                                                               | 33.1                                                                              | 0.0                                                                               | 2.8                                                                                | 0.0                                                                                 | 0.0                                                                                 | 1.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 18.4                                                                              | 3.0                                                                               | 0.0                                                                               | 2.2                                                                               | 19.6                                                                              | 0.0                                                                               | 46.1                                                                               | 0.0                                                                                 | 0.0                                                                                 | 43.1                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | B                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | B                                                                                 |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 307                                                                               |                                                                                   |                                                                                   | 1370                                                                              |                                                                                   |                                                                                    | 101                                                                                 |                                                                                     |                                                                                     | 41                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 3.1                                                                               |                                                                                   |                                                                                   | 19.5                                                                              |                                                                                   |                                                                                    | 46.1                                                                                |                                                                                     |                                                                                     | 43.1                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 4.5                                                                               | 82.0                                                                              |                                                                                   | 12.5                                                                              | 4.2                                                                               | 82.3                                                                              |                                                                                    | 12.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 78.0                                                                              |                                                                                   | 16.0                                                                              | 4.0                                                                               | 78.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 2.1                                                                               | 6.3                                                                               |                                                                                   | 8.3                                                                               | 2.0                                                                               | 58.8                                                                              |                                                                                    | 4.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 33.4                                                                              |                                                                                   | 0.4                                                                               | 0.0                                                                               | 14.5                                                                              |                                                                                    | 0.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 18.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 9: Silver Hill Rd & SR 236/Hugh Howell Rd

6/22/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | NBL                                                                               | NBR                                                                               | SET                                                                               | SER                                                                               | NWL                                                                               | NWT                                                                               |   |      |
| Lane Configurations                                                  |  |                                                                                   |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 159                                                                               | 16                                                                                | 274                                                                               | 50                                                                                | 14                                                                                | 728                                                                               |   |      |
| Number                                                               | 3                                                                                 | 18                                                                                | 6                                                                                 | 16                                                                                | 5                                                                                 | 2                                                                                 |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 181                                                                               | 18                                                                                | 330                                                                               | 60                                                                                | 16                                                                                | 809                                                                               |   |      |
| Adj No. of Lanes                                                     | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.88                                                                              | 0.88                                                                              | 0.83                                                                              | 0.83                                                                              | 0.90                                                                              | 0.90                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                 | 2                                                                                 |   |      |
| Cap, veh/h                                                           | 232                                                                               | 23                                                                                | 919                                                                               | 167                                                                               | 658                                                                               | 1301                                                                              |   |      |
| Arrive On Green                                                      | 0.15                                                                              | 0.15                                                                              | 0.61                                                                              | 0.61                                                                              | 0.02                                                                              | 0.70                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1589                                                                              | 158                                                                               | 1520                                                                              | 276                                                                               | 1774                                                                              | 1863                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 200                                                                               | 0                                                                                 | 0                                                                                 | 390                                                                               | 16                                                                                | 809                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1755                                                                              | 0                                                                                 | 0                                                                                 | 1796                                                                              | 1774                                                                              | 1863                                                                              |   |      |
| Q Serve(g_s), s                                                      | 5.7                                                                               | 0.0                                                                               | 0.0                                                                               | 5.6                                                                               | 0.2                                                                               | 11.9                                                                              |   |      |
| Cycle Q Clear(g_c), s                                                | 5.7                                                                               | 0.0                                                                               | 0.0                                                                               | 5.6                                                                               | 0.2                                                                               | 11.9                                                                              |   |      |
| Prop In Lane                                                         | 0.90                                                                              | 0.09                                                                              |                                                                                   | 0.15                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h                                               | 257                                                                               | 0                                                                                 | 0                                                                                 | 1087                                                                              | 658                                                                               | 1301                                                                              |   |      |
| V/C Ratio(X)                                                         | 0.78                                                                              | 0.00                                                                              | 0.00                                                                              | 0.36                                                                              | 0.02                                                                              | 0.62                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 545                                                                               | 0                                                                                 | 0                                                                                 | 1087                                                                              | 768                                                                               | 1301                                                                              |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 21.2                                                                              | 0.0                                                                               | 0.0                                                                               | 5.1                                                                               | 3.6                                                                               | 4.1                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 5.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.9                                                                               | 0.0                                                                               | 2.2                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 3.1                                                                               | 0.0                                                                               | 0.0                                                                               | 3.0                                                                               | 0.1                                                                               | 6.7                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 26.3                                                                              | 0.0                                                                               | 0.0                                                                               | 6.1                                                                               | 3.6                                                                               | 6.4                                                                               |   |      |
| LnGrp LOS                                                            | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h                                                  | 200                                                                               |                                                                                   | 390                                                                               |                                                                                   |                                                                                   | 825                                                                               |   |      |
| Approach Delay, s/veh                                                | 26.3                                                                              |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                   | 6.3                                                                               |   |      |
| Approach LOS                                                         | C                                                                                 |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 4.8                                                                               | 35.2                                                                              |   | 11.5 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 36.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 28.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 13.9                                                                              |                                                                                   |                                                                                   | 2.2                                                                               | 7.6                                                                               |   | 7.7  |
| Green Ext Time (p_c), s                                              |                                                                                   | 8.1                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 7.8                                                                               |   | 0.3  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 9.1                                                                               |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 10: Brockett Rd & US 29/L"Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 75                                                                                | 563                                                                               | 13                                                                                | 112                                                                               | 1158                                                                              | 176                                                                               | 122                                                                                | 190                                                                                 | 211                                                                                 | 40                                                                                  | 45                                                                                  | 88                                                                                  |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1827                                                                              | 1827                                                                              | 1900                                                                              | 1863                                                                               | 1863                                                                                | 1863                                                                                | 1792                                                                                | 1792                                                                                | 1792                                                                                |
| Adj Flow Rate, veh/h         | 82                                                                                | 619                                                                               | 14                                                                                | 126                                                                               | 1301                                                                              | 198                                                                               | 142                                                                                | 221                                                                                 | 245                                                                                 | 48                                                                                  | 54                                                                                  | 105                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.86                                                                               | 0.86                                                                                | 0.86                                                                                | 0.84                                                                                | 0.84                                                                                | 0.84                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 194                                                                               | 1549                                                                              | 35                                                                                | 461                                                                               | 1426                                                                              | 215                                                                               | 426                                                                                | 439                                                                                 | 373                                                                                 | 272                                                                                 | 386                                                                                 | 328                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.45                                                                              | 0.45                                                                              | 0.06                                                                              | 0.47                                                                              | 0.47                                                                              | 0.05                                                                               | 0.24                                                                                | 0.24                                                                                | 0.03                                                                                | 0.22                                                                                | 0.22                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 3405                                                                              | 77                                                                                | 1740                                                                              | 3025                                                                              | 457                                                                               | 1774                                                                               | 1863                                                                                | 1583                                                                                | 1707                                                                                | 1792                                                                                | 1524                                                                                |
| Grp Volume(v), veh/h         | 82                                                                                | 309                                                                               | 324                                                                               | 126                                                                               | 742                                                                               | 757                                                                               | 142                                                                                | 221                                                                                 | 245                                                                                 | 48                                                                                  | 54                                                                                  | 105                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1779                                                                              | 1740                                                                              | 1736                                                                              | 1746                                                                              | 1774                                                                               | 1863                                                                                | 1583                                                                                | 1707                                                                                | 1792                                                                                | 1524                                                                                |
| Q Serve(g_s), s              | 1.9                                                                               | 9.0                                                                               | 9.0                                                                               | 2.8                                                                               | 29.3                                                                              | 30.0                                                                              | 4.0                                                                                | 7.6                                                                                 | 10.4                                                                                | 1.6                                                                                 | 1.8                                                                                 | 4.3                                                                                 |
| Cycle Q Clear(g_c), s        | 1.9                                                                               | 9.0                                                                               | 9.0                                                                               | 2.8                                                                               | 29.3                                                                              | 30.0                                                                              | 4.0                                                                                | 7.6                                                                                 | 10.4                                                                                | 1.6                                                                                 | 1.8                                                                                 | 4.3                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.04                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 194                                                                               | 775                                                                               | 809                                                                               | 461                                                                               | 818                                                                               | 823                                                                               | 426                                                                                | 439                                                                                 | 373                                                                                 | 272                                                                                 | 386                                                                                 | 328                                                                                 |
| V/C Ratio(X)                 | 0.42                                                                              | 0.40                                                                              | 0.40                                                                              | 0.27                                                                              | 0.91                                                                              | 0.92                                                                              | 0.33                                                                               | 0.50                                                                                | 0.66                                                                                | 0.18                                                                                | 0.14                                                                                | 0.32                                                                                |
| Avail Cap(c_a), veh/h        | 211                                                                               | 775                                                                               | 809                                                                               | 496                                                                               | 818                                                                               | 823                                                                               | 426                                                                                | 439                                                                                 | 373                                                                                 | 307                                                                                 | 386                                                                                 | 328                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 16.8                                                                              | 13.5                                                                              | 13.5                                                                              | 10.1                                                                              | 18.1                                                                              | 18.3                                                                              | 21.8                                                                               | 24.6                                                                                | 25.7                                                                                | 21.8                                                                                | 23.6                                                                                | 24.5                                                                                |
| Incr Delay (d2), s/veh       | 1.5                                                                               | 1.5                                                                               | 1.5                                                                               | 0.3                                                                               | 15.7                                                                              | 17.0                                                                              | 0.5                                                                                | 4.1                                                                                 | 8.8                                                                                 | 0.3                                                                                 | 0.8                                                                                 | 2.6                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.9                                                                               | 4.5                                                                               | 4.7                                                                               | 1.4                                                                               | 17.4                                                                              | 18.2                                                                              | 0.5                                                                                | 4.4                                                                                 | 5.5                                                                                 | 0.8                                                                                 | 1.0                                                                                 | 2.0                                                                                 |
| LnGrp Delay(d),s/veh         | 18.2                                                                              | 15.0                                                                              | 15.0                                                                              | 10.4                                                                              | 33.8                                                                              | 35.3                                                                              | 22.3                                                                               | 28.7                                                                                | 34.4                                                                                | 22.1                                                                                | 24.3                                                                                | 27.1                                                                                |
| LnGrp LOS                    | B                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | D                                                                                 | C                                                                                  | C                                                                                   | C                                                                                   | C                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 715                                                                               |                                                                                   |                                                                                   | 1625                                                                              |                                                                                   |                                                                                    | 608                                                                                 |                                                                                     |                                                                                     | 207                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 15.4                                                                              |                                                                                   |                                                                                   | 32.7                                                                              |                                                                                   |                                                                                    | 29.5                                                                                |                                                                                     |                                                                                     | 25.2                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 8.5                                                                               | 37.8                                                                              | 6.5                                                                               | 21.5                                                                              | 7.3                                                                               | 39.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 33.0                                                                              | 4.0                                                                               | 16.0                                                                              | 4.0                                                                               | 35.0                                                                              | 4.0                                                                                | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 4.8                                                                               | 11.0                                                                              | 3.6                                                                               | 12.4                                                                              | 3.9                                                                               | 32.0                                                                              | 6.0                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 14.3                                                                              | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               | 2.6                                                                               | 0.0                                                                                | 2.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   |                                                                                   | 27.7                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 11: Idlewood Rd/Main St & US 29/L'Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 122                                                                               | 442                                                                               | 120                                                                               | 133                                                                               | 1191                                                                              | 85                                                                                | 120                                                                                | 262                                                                                 | 121                                                                                 | 46                                                                                  | 144                                                                                 | 116                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1863                                                                               | 1863                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1810                                                                                |
| Adj Flow Rate, veh/h         | 134                                                                               | 486                                                                               | 132                                                                               | 149                                                                               | 1338                                                                              | 96                                                                                | 133                                                                                | 291                                                                                 | 134                                                                                 | 55                                                                                  | 173                                                                                 | 140                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 216                                                                               | 1212                                                                              | 327                                                                               | 463                                                                               | 1544                                                                              | 110                                                                               | 357                                                                                | 314                                                                                 | 145                                                                                 | 166                                                                                 | 409                                                                                 | 348                                                                                 |
| Arrive On Green              | 0.06                                                                              | 0.46                                                                              | 0.46                                                                              | 0.07                                                                              | 0.47                                                                              | 0.47                                                                              | 0.07                                                                               | 0.26                                                                                | 0.26                                                                                | 0.03                                                                                | 0.23                                                                                | 0.23                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 2653                                                                              | 716                                                                               | 1757                                                                              | 3318                                                                              | 237                                                                               | 1774                                                                               | 1208                                                                                | 556                                                                                 | 1723                                                                                | 1810                                                                                | 1538                                                                                |
| Grp Volume(v), veh/h         | 134                                                                               | 311                                                                               | 307                                                                               | 149                                                                               | 705                                                                               | 729                                                                               | 133                                                                                | 0                                                                                   | 425                                                                                 | 55                                                                                  | 173                                                                                 | 140                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1666                                                                              | 1757                                                                              | 1752                                                                              | 1803                                                                              | 1774                                                                               | 0                                                                                   | 1765                                                                                | 1723                                                                                | 1810                                                                                | 1538                                                                                |
| Q Serve(g_s), s              | 3.6                                                                               | 10.6                                                                              | 10.7                                                                              | 3.9                                                                               | 31.5                                                                              | 31.8                                                                              | 4.9                                                                                | 0.0                                                                                 | 20.6                                                                                | 2.1                                                                                 | 7.2                                                                                 | 6.8                                                                                 |
| Cycle Q Clear(g_c), s        | 3.6                                                                               | 10.6                                                                              | 10.7                                                                              | 3.9                                                                               | 31.5                                                                              | 31.8                                                                              | 4.9                                                                                | 0.0                                                                                 | 20.6                                                                                | 2.1                                                                                 | 7.2                                                                                 | 6.8                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.43                                                                              | 1.00                                                                              |                                                                                   | 0.13                                                                              | 1.00                                                                               |                                                                                     | 0.32                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 216                                                                               | 778                                                                               | 761                                                                               | 463                                                                               | 816                                                                               | 839                                                                               | 357                                                                                | 0                                                                                   | 459                                                                                 | 166                                                                                 | 409                                                                                 | 348                                                                                 |
| V/C Ratio(X)                 | 0.62                                                                              | 0.40                                                                              | 0.40                                                                              | 0.32                                                                              | 0.86                                                                              | 0.87                                                                              | 0.37                                                                               | 0.00                                                                                | 0.93                                                                                | 0.33                                                                                | 0.42                                                                                | 0.40                                                                                |
| Avail Cap(c_a), veh/h        | 216                                                                               | 778                                                                               | 761                                                                               | 488                                                                               | 841                                                                               | 865                                                                               | 357                                                                                | 0                                                                                   | 463                                                                                 | 184                                                                                 | 434                                                                                 | 369                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 19.1                                                                              | 15.8                                                                              | 15.8                                                                              | 11.7                                                                              | 20.9                                                                              | 21.0                                                                              | 23.3                                                                               | 0.0                                                                                 | 31.6                                                                                | 26.6                                                                                | 29.0                                                                                | 28.8                                                                                |
| Incr Delay (d2), s/veh       | 5.3                                                                               | 1.5                                                                               | 1.6                                                                               | 0.4                                                                               | 9.1                                                                               | 9.3                                                                               | 0.6                                                                                | 0.0                                                                                 | 24.7                                                                                | 1.2                                                                                 | 0.7                                                                                 | 0.8                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 2.0                                                                               | 5.3                                                                               | 5.3                                                                               | 1.9                                                                               | 17.2                                                                              | 18.0                                                                              | 2.5                                                                                | 0.0                                                                                 | 13.2                                                                                | 1.1                                                                                 | 3.6                                                                                 | 2.9                                                                                 |
| LnGrp Delay(d),s/veh         | 24.4                                                                              | 17.3                                                                              | 17.4                                                                              | 12.1                                                                              | 30.1                                                                              | 30.3                                                                              | 23.9                                                                               | 0.0                                                                                 | 56.2                                                                                | 27.7                                                                                | 29.7                                                                                | 29.6                                                                                |
| LnGrp LOS                    | C                                                                                 | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 | C                                                                                  |                                                                                     | E                                                                                   | C                                                                                   | C                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 752                                                                               |                                                                                   |                                                                                   | 1583                                                                              |                                                                                   |                                                                                    | 558                                                                                 |                                                                                     |                                                                                     | 368                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 18.6                                                                              |                                                                                   |                                                                                   | 28.5                                                                              |                                                                                   |                                                                                    | 48.5                                                                                |                                                                                     |                                                                                     | 29.4                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.8                                                                               | 44.0                                                                              | 7.0                                                                               | 26.8                                                                              | 9.0                                                                               | 44.8                                                                              | 10.0                                                                               | 23.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 7.0                                                                               | 40.0                                                                              | 4.0                                                                               | 23.0                                                                              | 5.0                                                                               | 42.0                                                                              | 6.0                                                                                | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 5.9                                                                               | 12.7                                                                              | 4.1                                                                               | 22.6                                                                              | 5.6                                                                               | 33.8                                                                              | 6.9                                                                                | 9.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 15.7                                                                              | 0.0                                                                               | 0.2                                                                               | 0.0                                                                               | 6.4                                                                               | 0.0                                                                                | 3.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 29.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary 12: SR 236/Hugh Howell Rd & Silver Hill Rd

6/22/2016

|                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |     |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|-----|
|                              |  |  |  |  |  |  |   |     |
| Movement                     | WBL                                                                               | WBR                                                                               | SEL                                                                               | SET                                                                               | NWT                                                                               | NWR                                                                               |   |     |
| Lane Configurations          |  |  |  |  |  |  |   |     |
| Volume (veh/h)               | 50                                                                                | 166                                                                               | 115                                                                               | 172                                                                               | 575                                                                               | 41                                                                                |   |     |
| Number                       | 3                                                                                 | 18                                                                                | 1                                                                                 | 6                                                                                 | 2                                                                                 | 12                                                                                |   |     |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |     |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |   |     |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |     |
| Adj Sat Flow, veh/h/ln       | 1827                                                                              | 1827                                                                              | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                              |   |     |
| Adj Flow Rate, veh/h         | 58                                                                                | 0                                                                                 | 147                                                                               | 221                                                                               | 669                                                                               | 48                                                                                |   |     |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 |   |     |
| Peak Hour Factor             | 0.86                                                                              | 0.86                                                                              | 0.78                                                                              | 0.78                                                                              | 0.86                                                                              | 0.86                                                                              |   |     |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 |   |     |
| Cap, veh/h                   | 79                                                                                | 71                                                                                | 564                                                                               | 1455                                                                              | 1066                                                                              | 76                                                                                |   |     |
| Arrive On Green              | 0.05                                                                              | 0.00                                                                              | 0.07                                                                              | 0.78                                                                              | 0.62                                                                              | 0.62                                                                              |   |     |
| Sat Flow, veh/h              | 1740                                                                              | 1553                                                                              | 1774                                                                              | 1863                                                                              | 1718                                                                              | 123                                                                               |   |     |
| Grp Volume(v), veh/h         | 58                                                                                | 0                                                                                 | 147                                                                               | 221                                                                               | 0                                                                                 | 717                                                                               |   |     |
| Grp Sat Flow(s),veh/h/ln     | 1740                                                                              | 1553                                                                              | 1774                                                                              | 1863                                                                              | 0                                                                                 | 1841                                                                              |   |     |
| Q Serve(g_s), s              | 1.5                                                                               | 0.0                                                                               | 1.1                                                                               | 1.4                                                                               | 0.0                                                                               | 11.2                                                                              |   |     |
| Cycle Q Clear(g_c), s        | 1.5                                                                               | 0.0                                                                               | 1.1                                                                               | 1.4                                                                               | 0.0                                                                               | 11.2                                                                              |   |     |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |   |     |
| Lane Grp Cap(c), veh/h       | 79                                                                                | 71                                                                                | 564                                                                               | 1455                                                                              | 0                                                                                 | 1143                                                                              |   |     |
| V/C Ratio(X)                 | 0.73                                                                              | 0.00                                                                              | 0.26                                                                              | 0.15                                                                              | 0.00                                                                              | 0.63                                                                              |   |     |
| Avail Cap(c_a), veh/h        | 151                                                                               | 135                                                                               | 626                                                                               | 1455                                                                              | 0                                                                                 | 1143                                                                              |   |     |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |     |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              |   |     |
| Uniform Delay (d), s/veh     | 21.7                                                                              | 0.0                                                                               | 4.1                                                                               | 1.3                                                                               | 0.0                                                                               | 5.4                                                                               |   |     |
| Incr Delay (d2), s/veh       | 12.2                                                                              | 0.0                                                                               | 0.2                                                                               | 0.2                                                                               | 0.0                                                                               | 2.6                                                                               |   |     |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |     |
| %ile BackOfQ(50%),veh/ln     | 1.0                                                                               | 0.0                                                                               | 0.7                                                                               | 0.8                                                                               | 0.0                                                                               | 6.4                                                                               |   |     |
| LnGrp Delay(d),s/veh         | 34.0                                                                              | 0.0                                                                               | 4.3                                                                               | 1.5                                                                               | 0.0                                                                               | 8.0                                                                               |   |     |
| LnGrp LOS                    | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 |   |     |
| Approach Vol, veh/h          | 58                                                                                |                                                                                   |                                                                                   | 368                                                                               | 717                                                                               |                                                                                   |   |     |
| Approach Delay, s/veh        | 34.0                                                                              |                                                                                   |                                                                                   | 2.6                                                                               | 8.0                                                                               |                                                                                   |   |     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |   |     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8   |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8   |
| Phs Duration (G+Y+Rc), s     | 7.4                                                                               | 32.6                                                                              |                                                                                   |                                                                                   |                                                                                   | 40.0                                                                              |   | 6.1 |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |   | 4.0 |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 27.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.0                                                                              |   | 4.0 |
| Max Q Clear Time (g_c+l1), s | 3.1                                                                               | 13.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 3.4                                                                               |   | 3.5 |
| Green Ext Time (p_c), s      | 0.1                                                                               | 4.9                                                                               |                                                                                   |                                                                                   |                                                                                   | 6.6                                                                               |   | 0.0 |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   |                                                                                   |   |     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |     |

Intersection

Int Delay, s/veh 14.5

| Movement                 | WBL  | WBR   | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|-------|------|------|------|------|
| Vol, veh/h               | 61   | 52    | 1268 | 56   | 61   | 1087 |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free | Free | Free |
| RT Channelized           | -    | Yield | -    | None | -    | None |
| Storage Length           | 0    | 0     | -    | 150  | 150  | -    |
| Veh in Median Storage, # | 0    | -     | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -     | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92    | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2     | 3    | 3    | 6    | 6    |
| Mvmt Flow                | 66   | 57    | 1378 | 61   | 66   | 1182 |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2101   | 689    | 0      |
| Stage 1              | 1378   | -      | -      |
| Stage 2              | 723    | -      | -      |
| Critical Hdwy        | 6.84   | 6.94   | 4.22   |
| Critical Hdwy Stg 1  | 5.84   | -      | -      |
| Critical Hdwy Stg 2  | 5.84   | -      | -      |
| Follow-up Hdwy       | 3.52   | 3.32   | 2.26   |
| Pot Cap-1 Maneuver   | ~ 44   | 388    | 473    |
| Stage 1              | 199    | -      | -      |
| Stage 2              | 441    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | ~ 38   | 388    | 473    |
| Mov Cap-2 Maneuver   | ~ 38   | -      | -      |
| Stage 1              | 199    | -      | -      |
| Stage 2              | 379    | -      | -      |

| Approach             | WB       | NB | SB  |
|----------------------|----------|----|-----|
| HCM Control Delay, s | \$ 324.4 | 0  | 0.7 |
| HCM LOS              | F        |    |     |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1    | WBLn2 | SBL  | SBT |
|-----------------------|-----|-----|----------|-------|------|-----|
| Capacity (veh/h)      | -   | -   | 38       | 388   | 473  | -   |
| HCM Lane V/C Ratio    | -   | -   | 1.745    | 0.146 | 0.14 | -   |
| HCM Control Delay (s) | -   | -   | \$ 587.4 | 15.9  | 13.8 | -   |
| HCM Lane LOS          | -   | -   | F        | C     | B    | -   |
| HCM 95th %tile Q(veh) | -   | -   | 7.1      | 0.5   | 0.5  | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

**Intersection**

Int Delay, s/veh 0.4

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 5    | 18   | 1315 | 5    | 19   | 1144 |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 150  | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 3    | 3    | 6    | 6    |
| Mvmt Flow                | 5    | 20   | 1429 | 5    | 21   | 1243 |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2095   | 717    | 0      |
| Stage 1              | 1432   | -      | -      |
| Stage 2              | 663    | -      | -      |
| Critical Hdwy        | 6.84   | 6.94   | 4.22   |
| Critical Hdwy Stg 1  | 5.84   | -      | -      |
| Critical Hdwy Stg 2  | 5.84   | -      | -      |
| Follow-up Hdwy       | 3.52   | 3.32   | 2.26   |
| Pot Cap-1 Maneuver   | 45     | 372    | 449    |
| Stage 1              | 186    | -      | -      |
| Stage 2              | 474    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 43     | 372    | 449    |
| Mov Cap-2 Maneuver   | 43     | -      | -      |
| Stage 1              | 186    | -      | -      |
| Stage 2              | 452    | -      | -      |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 36.2 | 0  | 0.2 |
| HCM LOS              | E    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT |
|-----------------------|-----|----------|-------|-----|
| Capacity (veh/h)      | -   | - 140    | 449   | -   |
| HCM Lane V/C Ratio    | -   | - 0.179  | 0.046 | -   |
| HCM Control Delay (s) | -   | - 36.2   | 13.4  | -   |
| HCM Lane LOS          | -   | - E      | B     | -   |
| HCM 95th %tile Q(veh) | -   | - 0.6    | 0.1   | -   |

**Intersection**

Int Delay, s/veh 2.3

| Movement                 | EBL  | EBT  | WBT  | WBR   | SBL  | SBR   |
|--------------------------|------|------|------|-------|------|-------|
| Vol, veh/h               | 113  | 509  | 1399 | 5     | 5    | 110   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0     | 0    | 0     |
| Sign Control             | Free | Free | Free | Free  | Stop | Stop  |
| RT Channelized           | -    | None | -    | Yield | -    | Yield |
| Storage Length           | 150  | -    | -    | 150   | 0    | 0     |
| Veh in Median Storage, # | -    | 0    | 0    | -     | 0    | -     |
| Grade, %                 | -    | 0    | 0    | -     | 0    | -     |
| Peak Hour Factor         | 92   | 92   | 92   | 92    | 92   | 92    |
| Heavy Vehicles, %        | 5    | 5    | 2    | 2     | 2    | 2     |
| Mvmt Flow                | 123  | 553  | 1521 | 5     | 5    | 120   |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 1521   | 0      | 2043   |
| Stage 1              | -      | -      | 1521   |
| Stage 2              | -      | -      | 522    |
| Critical Hdwy        | 4.2    | -      | 6.84   |
| Critical Hdwy Stg 1  | -      | -      | 5.84   |
| Critical Hdwy Stg 2  | -      | -      | 5.84   |
| Follow-up Hdwy       | 2.25   | -      | 3.52   |
| Pot Cap-1 Maneuver   | 420    | -      | 49     |
| Stage 1              | -      | -      | 167    |
| Stage 2              | -      | -      | 560    |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 420    | -      | 35     |
| Mov Cap-2 Maneuver   | -      | -      | 35     |
| Stage 1              | -      | -      | 167    |
| Stage 2              | -      | -      | 396    |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 3.1 | 0  | 25.2 |
| HCM LOS              |     |    | D    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h)      | 420   | -   | -   | -   | 35    | 349   |
| HCM Lane V/C Ratio    | 0.292 | -   | -   | -   | 0.155 | 0.343 |
| HCM Control Delay (s) | 17.1  | -   | -   | -   | 125.9 | 20.6  |
| HCM Lane LOS          | C     | -   | -   | -   | F     | C     |
| HCM 95th %tile Q(veh) | 1.2   | -   | -   | -   | 0.5   | 1.5   |

| Intersection             |        |      |        |       |        |       |
|--------------------------|--------|------|--------|-------|--------|-------|
| Int Delay, s/veh         | 0.4    |      |        |       |        |       |
| Movement                 | EBL    | EBT  | WBT    | WBR   | SBL    | SBR   |
| Vol, veh/h               | 19     | 289  | 1373   | 5     | 5      | 18    |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0     | 0      | 0     |
| Sign Control             | Free   | Free | Free   | Free  | Stop   | Stop  |
| RT Channelized           | -      | None | -      | Yield | -      | Yield |
| Storage Length           | 150    | -    | -      | 150   | 0      | -     |
| Veh in Median Storage, # | -      | 0    | 0      | -     | 0      | -     |
| Grade, %                 | -      | 0    | 0      | -     | 0      | -     |
| Peak Hour Factor         | 92     | 92   | 92     | 92    | 92     | 92    |
| Heavy Vehicles, %        | 6      | 6    | 2      | 2     | 2      | 2     |
| Mvmt Flow                | 21     | 314  | 1492   | 5     | 5      | 20    |
| Major/Minor              | Major1 |      | Major2 |       | Minor2 |       |
| Conflicting Flow All     | 1492   | 0    | -      | 0     | 1690   | 746   |
| Stage 1                  | -      | -    | -      | -     | 1492   | -     |
| Stage 2                  | -      | -    | -      | -     | 198    | -     |
| Critical Hdwy            | 4.22   | -    | -      | -     | 6.84   | 6.94  |
| Critical Hdwy Stg 1      | -      | -    | -      | -     | 5.84   | -     |
| Critical Hdwy Stg 2      | -      | -    | -      | -     | 5.84   | -     |
| Follow-up Hdwy           | 2.26   | -    | -      | -     | 3.52   | 3.32  |
| Pot Cap-1 Maneuver       | 427    | -    | -      | -     | 84     | 356   |
| Stage 1                  | -      | -    | -      | -     | 173    | -     |
| Stage 2                  | -      | -    | -      | -     | 816    | -     |
| Platoon blocked, %       | -      | -    | -      | -     | -      | -     |
| Mov Cap-1 Maneuver       | 427    | -    | -      | -     | 80     | 356   |
| Mov Cap-2 Maneuver       | -      | -    | -      | -     | 80     | -     |
| Stage 1                  | -      | -    | -      | -     | 173    | -     |
| Stage 2                  | -      | -    | -      | -     | 776    | -     |
| Approach                 | EB     |      | WB     |       | SB     |       |
| HCM Control Delay, s     | 0.9    |      | 0      |       | 15.5   |       |
| HCM LOS                  |        |      |        |       | C      |       |
| Minor Lane/Major Mvmt    | EBL    | EBT  | WBT    | WBR   | SBLn1  |       |
| Capacity (veh/h)         | 427    | -    | -      | -     | 368    |       |
| HCM Lane V/C Ratio       | 0.048  | -    | -      | -     | 0.068  |       |
| HCM Control Delay (s)    | 13.9   | -    | -      | -     | 15.5   |       |
| HCM Lane LOS             | B      | -    | -      | -     | C      |       |
| HCM 95th %tile Q(veh)    | 0.2    | -    | -      | -     | 0.2    |       |

# HCM 2010 Signalized Intersection Summary

## 1: Mtn Indus Blvd & US 78 WB Off Ramp/US 78 WB On Ramp

6/22/2016

|                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                  |  |  |  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |  |  |  |                                                                                     |
| Volume (veh/h)                                                       | 645                                                                               | 0                                                                                 | 285                                                                               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1145                                                                                | 189                                                                                 | 487                                                                                 | 1398                                                                                | 0                                                                                   |
| Number                                                               | 7                                                                                 | 4                                                                                 | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln                                               | 1776                                                                              | 1776                                                                              | 1776                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1810                                                                                | 1810                                                                                | 1776                                                                                | 1776                                                                                | 0                                                                                   |
| Adj Flow Rate, veh/h                                                 | 722                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1282                                                                                | 0                                                                                   | 545                                                                                 | 1565                                                                                | 0                                                                                   |
| Adj No. of Lanes                                                     | 2                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 3                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor                                                     | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                                 | 7                                                                                 | 7                                                                                 | 7                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5                                                                                   | 5                                                                                   | 7                                                                                   | 7                                                                                   | 0                                                                                   |
| Cap, veh/h                                                           | 813                                                                               | 0                                                                                 | 363                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1557                                                                                | 485                                                                                 | 581                                                                                 | 2148                                                                                | 0                                                                                   |
| Arrive On Green                                                      | 0.24                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.32                                                                                | 0.00                                                                                | 0.26                                                                                | 0.64                                                                                | 0.00                                                                                |
| Sat Flow, veh/h                                                      | 3382                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 5103                                                                                | 1538                                                                                | 1691                                                                                | 3463                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h                                                 | 722                                                                               | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1282                                                                                | 0                                                                                   | 545                                                                                 | 1565                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln                                             | 1691                                                                              | 0                                                                                 | 1509                                                                              |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1647                                                                                | 1538                                                                                | 1691                                                                                | 1687                                                                                | 0                                                                                   |
| Q Serve(g_s), s                                                      | 13.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 15.6                                                                                | 0.0                                                                                 | 14.8                                                                                | 20.4                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s                                                | 13.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 15.6                                                                                | 0.0                                                                                 | 14.8                                                                                | 20.4                                                                                | 0.0                                                                                 |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h                                               | 813                                                                               | 0                                                                                 | 363                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1557                                                                                | 485                                                                                 | 581                                                                                 | 2148                                                                                | 0                                                                                   |
| V/C Ratio(X)                                                         | 0.89                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 0.82                                                                                | 0.00                                                                                | 0.94                                                                                | 0.73                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h                                                | 833                                                                               | 0                                                                                 | 372                                                                               |                                                                                   |                                                                                   |                                                                                   | 0                                                                                  | 1557                                                                                | 485                                                                                 | 584                                                                                 | 2148                                                                                | 0                                                                                   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.00                                                                               | 1.00                                                                                | 0.00                                                                                | 0.09                                                                                | 0.09                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh                                             | 23.8                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 20.6                                                                                | 0.0                                                                                 | 14.6                                                                                | 8.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh                                               | 11.4                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 5.1                                                                                 | 0.0                                                                                 | 3.4                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                             | 7.5                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 7.7                                                                                 | 0.0                                                                                 | 9.9                                                                                 | 9.4                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh                                                 | 35.2                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                | 25.6                                                                                | 0.0                                                                                 | 18.0                                                                                | 8.2                                                                                 | 0.0                                                                                 |
| LnGrp LOS                                                            | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | C                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Vol, veh/h                                                  |                                                                                   | 722                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 1282                                                                                |                                                                                     |                                                                                     | 2110                                                                                |                                                                                     |
| Approach Delay, s/veh                                                |                                                                                   | 35.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 25.6                                                                                |                                                                                     |                                                                                     | 10.7                                                                                |                                                                                     |
| Approach LOS                                                         |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                                                         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                             | 20.9                                                                              | 24.5                                                                              |                                                                                   | 19.6                                                                              |                                                                                   | 45.4                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                              | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                          | 17.0                                                                              | 20.0                                                                              |                                                                                   | 16.0                                                                              |                                                                                   | 41.0                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s                                         | 16.8                                                                              | 17.6                                                                              |                                                                                   | 15.4                                                                              |                                                                                   | 22.4                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                              | 0.0                                                                               | 2.3                                                                               |                                                                                   | 0.2                                                                               |                                                                                   | 16.1                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 19.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/22/2016

|                              |  |       |     |                                                                                   |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
|------------------------------|------------------------------------------------------------------------------------|-------|-----|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                                | EBT   | EBR | WBL                                                                               | WBT   | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR  | SBL  | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                    |       |     |  |       |  |  |  |      |      |  |  |
| Volume (veh/h)               | 0                                                                                  | 0     | 0   | 65                                                                                | 0     | 200                                                                               | 310                                                                                 | 1518                                                                                | 0    | 0    | 1817                                                                                | 927                                                                                 |
| Number                       |                                                                                    |       |     | 3                                                                                 | 8     | 18                                                                                | 5                                                                                   | 2                                                                                   | 12   | 1    | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          |                                                                                    |       |     | 0                                                                                 | 0     | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0    | 0    | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          |                                                                                    |       |     | 1.00                                                                              |       | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00 | 1.00 |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             |                                                                                    |       |     | 1.00                                                                              | 1.00  | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       |                                                                                    |       |     | 1937                                                                              | 0     | 1863                                                                              | 1792                                                                                | 1792                                                                                | 0    | 0    | 1776                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         |                                                                                    |       |     | 73                                                                                | 0     | 224                                                                               | 347                                                                                 | 1700                                                                                | 0    | 0    | 2034                                                                                | 0                                                                                   |
| Adj No. of Lanes             |                                                                                    |       |     | 1                                                                                 | 0     | 1                                                                                 | 1                                                                                   | 2                                                                                   | 0    | 0    | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor             |                                                                                    |       |     | 0.92                                                                              | 0.92  | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92 | 0.92 | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         |                                                                                    |       |     | 2                                                                                 | 0     | 2                                                                                 | 6                                                                                   | 6                                                                                   | 0    | 0    | 7                                                                                   | 7                                                                                   |
| Cap, veh/h                   |                                                                                    |       |     | 197                                                                               | 0     | 169                                                                               | 370                                                                                 | 2861                                                                                | 0    | 0    | 3279                                                                                | 0                                                                                   |
| Arrive On Green              |                                                                                    |       |     | 0.11                                                                              | 0.00  | 0.11                                                                              | 0.14                                                                                | 0.84                                                                                | 0.00 | 0.00 | 0.68                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              |                                                                                    |       |     | 1845                                                                              | 0     | 1583                                                                              | 1707                                                                                | 3495                                                                                | 0    | 0    | 5167                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         |                                                                                    |       |     | 73                                                                                | 0     | 224                                                                               | 347                                                                                 | 1700                                                                                | 0    | 0    | 2034                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     |                                                                                    |       |     | 1845                                                                              | 0     | 1583                                                                              | 1707                                                                                | 1703                                                                                | 0    | 0    | 1616                                                                                | 0                                                                                   |
| Q Serve(g_s), s              |                                                                                    |       |     | 5.5                                                                               | 0.0   | 16.0                                                                              | 18.0                                                                                | 23.9                                                                                | 0.0  | 0.0  | 35.1                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        |                                                                                    |       |     | 5.5                                                                               | 0.0   | 16.0                                                                              | 18.0                                                                                | 23.9                                                                                | 0.0  | 0.0  | 35.1                                                                                | 0.0                                                                                 |
| Prop In Lane                 |                                                                                    |       |     | 1.00                                                                              |       | 1.00                                                                              | 1.00                                                                                |                                                                                     | 0.00 | 0.00 |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       |                                                                                    |       |     | 197                                                                               | 0     | 169                                                                               | 370                                                                                 | 2861                                                                                | 0    | 0    | 3279                                                                                | 0                                                                                   |
| V/C Ratio(X)                 |                                                                                    |       |     | 0.37                                                                              | 0.00  | 1.33                                                                              | 0.94                                                                                | 0.59                                                                                | 0.00 | 0.00 | 0.62                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        |                                                                                    |       |     | 197                                                                               | 0     | 169                                                                               | 432                                                                                 | 2861                                                                                | 0    | 0    | 3279                                                                                | 0                                                                                   |
| HCM Platoon Ratio            |                                                                                    |       |     | 1.00                                                                              | 1.00  | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00 | 1.00 | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           |                                                                                    |       |     | 1.00                                                                              | 0.00  | 1.00                                                                              | 0.38                                                                                | 0.38                                                                                | 0.00 | 0.00 | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     |                                                                                    |       |     | 62.3                                                                              | 0.0   | 67.0                                                                              | 41.4                                                                                | 3.8                                                                                 | 0.0  | 0.0  | 13.5                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       |                                                                                    |       |     | 1.2                                                                               | 0.0   | 181.8                                                                             | 13.0                                                                                | 0.3                                                                                 | 0.0  | 0.0  | 0.9                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    |                                                                                    |       |     | 0.0                                                                               | 0.0   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0  | 0.0  | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     |                                                                                    |       |     | 2.9                                                                               | 0.0   | 15.5                                                                              | 15.5                                                                                | 11.0                                                                                | 0.0  | 0.0  | 15.9                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         |                                                                                    |       |     | 63.5                                                                              | 0.0   | 248.8                                                                             | 54.4                                                                                | 4.2                                                                                 | 0.0  | 0.0  | 14.4                                                                                | 0.0                                                                                 |
| LnGrp LOS                    |                                                                                    |       |     | E                                                                                 |       | F                                                                                 | D                                                                                   | A                                                                                   |      |      | B                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                    |       |     |                                                                                   | 297   |                                                                                   |                                                                                     | 2047                                                                                |      |      | 2034                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                    |       |     |                                                                                   | 203.3 |                                                                                   |                                                                                     | 12.7                                                                                |      |      | 14.4                                                                                |                                                                                     |
| Approach LOS                 |                                                                                    |       |     |                                                                                   | F     |                                                                                   |                                                                                     | B                                                                                   |      |      | B                                                                                   |                                                                                     |
| Timer                        | 1                                                                                  | 2     | 3   | 4                                                                                 | 5     | 6                                                                                 | 7                                                                                   | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Assigned Phs                 |                                                                                    | 2     |     |                                                                                   | 5     | 6                                                                                 |                                                                                     | 8                                                                                   |      |      |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     |                                                                                    | 130.0 |     |                                                                                   | 24.5  | 105.5                                                                             |                                                                                     | 20.0                                                                                |      |      |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      |                                                                                    | 4.0   |     |                                                                                   | 4.0   | 4.0                                                                               |                                                                                     | 4.0                                                                                 |      |      |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  |                                                                                    | 126.0 |     |                                                                                   | 26.0  | 96.0                                                                              |                                                                                     | 16.0                                                                                |      |      |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s |                                                                                    | 25.9  |     |                                                                                   | 20.0  | 37.1                                                                              |                                                                                     | 18.0                                                                                |      |      |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      |                                                                                    | 81.8  |     |                                                                                   | 0.6   | 52.1                                                                              |                                                                                     | 0.0                                                                                 |      |      |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                    |       |     |                                                                                   |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                    |       |     | 26.4                                                                              |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                    |       |     | C                                                                                 |       |                                                                                   |                                                                                     |                                                                                     |      |      |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 100                                                                               | 874                                                                               | 246                                                                               | 306                                                                               | 384                                                                               | 85                                                                                | 213                                                                                | 884                                                                                 | 297                                                                                 | 273                                                                                 | 1179                                                                                | 79                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1792                                                                               | 1792                                                                                | 1900                                                                                | 1810                                                                                | 1810                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 109                                                                               | 950                                                                               | 267                                                                               | 333                                                                               | 417                                                                               | 0                                                                                 | 232                                                                                | 961                                                                                 | 323                                                                                 | 297                                                                                 | 1282                                                                                | 86                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 6                                                                                  | 6                                                                                   | 6                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 410                                                                               | 765                                                                               | 214                                                                               | 265                                                                               | 1157                                                                              | 0                                                                                 | 174                                                                                | 878                                                                                 | 293                                                                                 | 244                                                                                 | 1276                                                                                | 85                                                                                  |
| Arrive On Green              | 0.06                                                                              | 0.28                                                                              | 0.28                                                                              | 0.11                                                                              | 0.33                                                                              | 0.00                                                                              | 0.06                                                                               | 0.35                                                                                | 0.35                                                                                | 0.10                                                                                | 0.39                                                                                | 0.39                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 2732                                                                              | 766                                                                               | 1757                                                                              | 3597                                                                              | 0                                                                                 | 1707                                                                               | 2509                                                                                | 838                                                                                 | 1723                                                                                | 3271                                                                                | 219                                                                                 |
| Grp Volume(v), veh/h         | 109                                                                               | 614                                                                               | 603                                                                               | 333                                                                               | 417                                                                               | 0                                                                                 | 232                                                                                | 650                                                                                 | 634                                                                                 | 297                                                                                 | 673                                                                                 | 695                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1728                                                                              | 1757                                                                              | 1752                                                                              | 0                                                                                 | 1707                                                                               | 1703                                                                                | 1644                                                                                | 1723                                                                                | 1719                                                                                | 1771                                                                                |
| Q Serve(g_s), s              | 4.3                                                                               | 28.0                                                                              | 28.0                                                                              | 11.0                                                                              | 9.0                                                                               | 0.0                                                                               | 6.0                                                                                | 35.0                                                                                | 35.0                                                                                | 10.0                                                                                | 39.0                                                                                | 39.0                                                                                |
| Cycle Q Clear(g_c), s        | 4.3                                                                               | 28.0                                                                              | 28.0                                                                              | 11.0                                                                              | 9.0                                                                               | 0.0                                                                               | 6.0                                                                                | 35.0                                                                                | 35.0                                                                                | 10.0                                                                                | 39.0                                                                                | 39.0                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.44                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                               |                                                                                     | 0.51                                                                                | 1.00                                                                                |                                                                                     | 0.12                                                                                |
| Lane Grp Cap(c), veh/h       | 410                                                                               | 495                                                                               | 484                                                                               | 265                                                                               | 1157                                                                              | 0                                                                                 | 174                                                                                | 596                                                                                 | 576                                                                                 | 244                                                                                 | 670                                                                                 | 691                                                                                 |
| V/C Ratio(X)                 | 0.27                                                                              | 1.24                                                                              | 1.25                                                                              | 1.26                                                                              | 0.36                                                                              | 0.00                                                                              | 1.33                                                                               | 1.09                                                                                | 1.10                                                                                | 1.22                                                                                | 1.00                                                                                | 1.01                                                                                |
| Avail Cap(c_a), veh/h        | 410                                                                               | 495                                                                               | 484                                                                               | 265                                                                               | 1157                                                                              | 0                                                                                 | 174                                                                                | 596                                                                                 | 576                                                                                 | 244                                                                                 | 670                                                                                 | 691                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 23.3                                                                              | 36.0                                                                              | 36.0                                                                              | 27.0                                                                              | 25.5                                                                              | 0.0                                                                               | 27.7                                                                               | 32.5                                                                                | 32.5                                                                                | 27.9                                                                                | 30.5                                                                                | 30.5                                                                                |
| Incr Delay (d2), s/veh       | 0.3                                                                               | 124.3                                                                             | 127.0                                                                             | 141.9                                                                             | 0.2                                                                               | 0.0                                                                               | 182.4                                                                              | 64.2                                                                                | 68.1                                                                                | 128.4                                                                               | 35.6                                                                                | 35.9                                                                                |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 2.1                                                                               | 30.7                                                                              | 30.4                                                                              | 17.8                                                                              | 4.4                                                                               | 0.0                                                                               | 10.8                                                                               | 27.0                                                                                | 26.7                                                                                | 15.4                                                                                | 25.1                                                                                | 25.9                                                                                |
| LnGrp Delay(d),s/veh         | 23.6                                                                              | 160.3                                                                             | 163.0                                                                             | 168.9                                                                             | 25.7                                                                              | 0.0                                                                               | 210.1                                                                              | 96.7                                                                                | 100.6                                                                               | 156.3                                                                               | 66.1                                                                                | 66.5                                                                                |
| LnGrp LOS                    | C                                                                                 | F                                                                                 | F                                                                                 | F                                                                                 | C                                                                                 |                                                                                   | F                                                                                  | F                                                                                   | F                                                                                   | F                                                                                   | F                                                                                   | F                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 1326                                                                              |                                                                                   |                                                                                   | 750                                                                               |                                                                                   |                                                                                    | 1516                                                                                |                                                                                     |                                                                                     | 1665                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 150.3                                                                             |                                                                                   |                                                                                   | 89.3                                                                              |                                                                                   |                                                                                    | 115.7                                                                               |                                                                                     |                                                                                     | 82.3                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | F                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 14.0                                                                              | 39.0                                                                              | 15.0                                                                              | 32.0                                                                              | 10.0                                                                              | 43.0                                                                              | 10.0                                                                               | 37.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 35.0                                                                              | 11.0                                                                              | 28.0                                                                              | 6.0                                                                               | 39.0                                                                              | 6.0                                                                                | 33.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 12.0                                                                              | 37.0                                                                              | 13.0                                                                              | 30.0                                                                              | 8.0                                                                               | 41.0                                                                              | 6.3                                                                                | 11.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 10.9                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 110.1                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 4: Mtn Indus. Blvd./Jimmy Carter Blvd & US 29/L'Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 246                                                                               | 1203                                                                              | 36                                                                                | 251                                                                               | 618                                                                               | 167                                                                               | 36                                                                                  | 698                                                                                 | 614                                                                                 | 264                                                                                 | 992                                                                                 | 289                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1827                                                                                | 1827                                                                                | 1827                                                                                | 1845                                                                                | 1845                                                                                | 1845                                                                                |
| Adj Flow Rate, veh/h         | 267                                                                               | 1308                                                                              | 39                                                                                | 273                                                                               | 672                                                                               | 182                                                                               | 41                                                                                  | 793                                                                                 | 0                                                                                   | 287                                                                                 | 1078                                                                                | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 3                                                                                   | 3                                                                                   | 3                                                                                   |
| Cap, veh/h                   | 385                                                                               | 1287                                                                              | 38                                                                                | 275                                                                               | 985                                                                               | 267                                                                               | 140                                                                                 | 810                                                                                 | 362                                                                                 | 279                                                                                 | 1363                                                                                | 610                                                                                 |
| Arrive On Green              | 0.12                                                                              | 0.37                                                                              | 0.37                                                                              | 0.11                                                                              | 0.36                                                                              | 0.36                                                                              | 0.23                                                                                | 0.23                                                                                | 0.00                                                                                | 0.11                                                                                | 0.39                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3509                                                                              | 105                                                                               | 1757                                                                              | 2728                                                                              | 738                                                                               | 511                                                                                 | 3471                                                                                | 1553                                                                                | 1757                                                                                | 3505                                                                                | 1568                                                                                |
| Grp Volume(v), veh/h         | 267                                                                               | 659                                                                               | 688                                                                               | 273                                                                               | 431                                                                               | 423                                                                               | 41                                                                                  | 793                                                                                 | 0                                                                                   | 287                                                                                 | 1078                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1844                                                                              | 1757                                                                              | 1752                                                                              | 1714                                                                              | 511                                                                                 | 1736                                                                                | 1553                                                                                | 1757                                                                                | 1752                                                                                | 1568                                                                                |
| Q Serve(g_s), s              | 8.3                                                                               | 33.0                                                                              | 33.0                                                                              | 9.9                                                                               | 18.8                                                                              | 18.8                                                                              | 6.9                                                                                 | 20.4                                                                                | 0.0                                                                                 | 10.0                                                                                | 24.4                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 8.3                                                                               | 33.0                                                                              | 33.0                                                                              | 9.9                                                                               | 18.8                                                                              | 18.8                                                                              | 17.4                                                                                | 20.4                                                                                | 0.0                                                                                 | 10.0                                                                                | 24.4                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.06                                                                              | 1.00                                                                              |                                                                                   | 0.43                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 385                                                                               | 649                                                                               | 676                                                                               | 275                                                                               | 632                                                                               | 619                                                                               | 140                                                                                 | 810                                                                                 | 362                                                                                 | 279                                                                                 | 1363                                                                                | 610                                                                                 |
| V/C Ratio(X)                 | 0.69                                                                              | 1.02                                                                              | 1.02                                                                              | 0.99                                                                              | 0.68                                                                              | 0.68                                                                              | 0.29                                                                                | 0.98                                                                                | 0.00                                                                                | 1.03                                                                                | 0.79                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 434                                                                               | 649                                                                               | 676                                                                               | 275                                                                               | 632                                                                               | 619                                                                               | 140                                                                                 | 810                                                                                 | 362                                                                                 | 279                                                                                 | 1363                                                                                | 610                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 17.8                                                                              | 28.5                                                                              | 28.5                                                                              | 24.6                                                                              | 24.4                                                                              | 24.4                                                                              | 38.1                                                                                | 34.3                                                                                | 0.0                                                                                 | 25.4                                                                                | 24.3                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 4.1                                                                               | 39.3                                                                              | 39.0                                                                              | 51.9                                                                              | 3.0                                                                               | 3.1                                                                               | 5.2                                                                                 | 26.9                                                                                | 0.0                                                                                 | 61.0                                                                                | 4.8                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 4.4                                                                               | 23.1                                                                              | 24.0                                                                              | 10.7                                                                              | 9.6                                                                               | 9.5                                                                               | 1.2                                                                                 | 12.8                                                                                | 0.0                                                                                 | 4.7                                                                                 | 12.6                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 21.9                                                                              | 67.8                                                                              | 67.5                                                                              | 76.5                                                                              | 27.4                                                                              | 27.5                                                                              | 43.3                                                                                | 61.2                                                                                | 0.0                                                                                 | 86.4                                                                                | 29.0                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 | F                                                                                 | F                                                                                 | E                                                                                 | C                                                                                 | C                                                                                 | D                                                                                   | E                                                                                   |                                                                                     | F                                                                                   | C                                                                                   |                                                                                     |
| Approach Vol, veh/h          | 1614                                                                              |                                                                                   |                                                                                   |                                                                                   | 1127                                                                              |                                                                                   |                                                                                     |                                                                                     | 834                                                                                 |                                                                                     | 1365                                                                                |                                                                                     |
| Approach Delay, s/veh        | 60.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 39.3                                                                              |                                                                                   |                                                                                     |                                                                                     | 60.3                                                                                |                                                                                     | 41.1                                                                                |                                                                                     |
| Approach LOS                 | E                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 14.0                                                                              | 25.0                                                                              | 14.0                                                                              | 37.0                                                                              | 39.0                                                                              |                                                                                   | 14.5                                                                                | 36.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 10.0                                                                              | 21.0                                                                              | 10.0                                                                              | 33.0                                                                              | 35.0                                                                              |                                                                                   | 13.0                                                                                | 30.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 12.0                                                                              | 22.4                                                                              | 11.9                                                                              | 35.0                                                                              | 26.4                                                                              |                                                                                   | 10.3                                                                                | 20.8                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 6.6                                                                               |                                                                                   | 0.2                                                                                 | 7.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 50.1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 5: US 29/L'Ville Hwy & SR 236/ Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |  |                                                                                    |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 700                                                                               | 744                                                                               | 14                                                                                | 1                                                                                 | 424                                                                               | 495                                                                               | 7                                                                                  | 15                                                                                  | 1                                                                                   | 849                                                                                 | 20                                                                                  | 752                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                |
| Adj Flow Rate, veh/h         | 761                                                                               | 809                                                                               | 15                                                                                | 1                                                                                 | 487                                                                               | 0                                                                                 | 12                                                                                 | 25                                                                                  | 2                                                                                   | 949                                                                                 | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes             | 2                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.60                                                                               | 0.60                                                                                | 0.60                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 727                                                                               | 1540                                                                              | 29                                                                                | 198                                                                               | 629                                                                               | 281                                                                               | 94                                                                                 | 196                                                                                 | 16                                                                                  | 956                                                                                 | 0                                                                                   | 426                                                                                 |
| Arrive On Green              | 0.21                                                                              | 0.43                                                                              | 0.43                                                                              | 0.18                                                                              | 0.18                                                                              | 0.00                                                                              | 0.17                                                                               | 0.17                                                                                | 0.17                                                                                | 0.27                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 3442                                                                              | 3555                                                                              | 66                                                                                | 662                                                                               | 3539                                                                              | 1583                                                                              | 565                                                                                | 1177                                                                                | 94                                                                                  | 3583                                                                                | 0                                                                                   | 1599                                                                                |
| Grp Volume(v), veh/h         | 761                                                                               | 403                                                                               | 421                                                                               | 1                                                                                 | 487                                                                               | 0                                                                                 | 39                                                                                 | 0                                                                                   | 0                                                                                   | 949                                                                                 | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1721                                                                              | 1770                                                                              | 1851                                                                              | 662                                                                               | 1770                                                                              | 1583                                                                              | 1836                                                                               | 0                                                                                   | 0                                                                                   | 1792                                                                                | 0                                                                                   | 1599                                                                                |
| Q Serve(g_s), s              | 19.0                                                                              | 15.0                                                                              | 15.0                                                                              | 0.1                                                                               | 11.8                                                                              | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 23.8                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 19.0                                                                              | 15.0                                                                              | 15.0                                                                              | 0.1                                                                               | 11.8                                                                              | 0.0                                                                               | 1.6                                                                                | 0.0                                                                                 | 0.0                                                                                 | 23.8                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.04                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.31                                                                               |                                                                                     | 0.05                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 727                                                                               | 767                                                                               | 802                                                                               | 198                                                                               | 629                                                                               | 281                                                                               | 306                                                                                | 0                                                                                   | 0                                                                                   | 956                                                                                 | 0                                                                                   | 426                                                                                 |
| V/C Ratio(X)                 | 1.05                                                                              | 0.53                                                                              | 0.53                                                                              | 0.01                                                                              | 0.77                                                                              | 0.00                                                                              | 0.13                                                                               | 0.00                                                                                | 0.00                                                                                | 0.99                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 727                                                                               | 767                                                                               | 802                                                                               | 198                                                                               | 629                                                                               | 281                                                                               | 306                                                                                | 0                                                                                   | 0                                                                                   | 956                                                                                 | 0                                                                                   | 426                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 35.5                                                                              | 18.7                                                                              | 18.7                                                                              | 30.5                                                                              | 35.3                                                                              | 0.0                                                                               | 31.9                                                                               | 0.0                                                                                 | 0.0                                                                                 | 32.9                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 46.5                                                                              | 2.6                                                                               | 2.5                                                                               | 0.0                                                                               | 9.0                                                                               | 0.0                                                                               | 0.9                                                                                | 0.0                                                                                 | 0.0                                                                                 | 27.5                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 13.7                                                                              | 7.8                                                                               | 8.2                                                                               | 0.0                                                                               | 6.5                                                                               | 0.0                                                                               | 0.9                                                                                | 0.0                                                                                 | 0.0                                                                                 | 15.4                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 82.0                                                                              | 21.3                                                                              | 21.2                                                                              | 30.5                                                                              | 44.3                                                                              | 0.0                                                                               | 32.8                                                                               | 0.0                                                                                 | 0.0                                                                                 | 60.4                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | F                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | D                                                                                 |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          | 1585                                                                              |                                                                                   |                                                                                   | 488                                                                               |                                                                                   |                                                                                   | 39                                                                                 |                                                                                     |                                                                                     | 949                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 50.4                                                                              |                                                                                   |                                                                                   | 44.2                                                                              |                                                                                   |                                                                                   | 32.8                                                                               |                                                                                     |                                                                                     | 60.4                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                  |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 2                                                                                 |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 6                                                                                  |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 43.0                                                                              |                                                                                   | 19.0                                                                              |                                                                                   | 23.0                                                                              |                                                                                   | 20.0                                                                               |                                                                                     | 28.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                                |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 39.0                                                                              |                                                                                   | 15.0                                                                              |                                                                                   | 19.0                                                                              |                                                                                   | 16.0                                                                               |                                                                                     | 24.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 17.0                                                                              |                                                                                   | 3.6                                                                               |                                                                                   | 21.0                                                                              |                                                                                   | 13.8                                                                               |                                                                                     | 25.8                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 8.1                                                                               |                                                                                   | 0.1                                                                               |                                                                                   | 0.0                                                                               |                                                                                   | 1.5                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 52.3                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

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User approved volume balancing among the lanes for turning movement.

# HCM 2010 Signalized Intersection Summary

## 6: Flintstone Dr/Site Drive #2

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |  |                                                                                    |  |                                                                                     |  |  |                                                                                     |
| Volume (veh/h)               | 162                                                                               | 1215                                                                              | 19                                                                                | 14                                                                                | 439                                                                               | 32                                                                                | 34                                                                                 | 0                                                                                   | 142                                                                                 | 51                                                                                  | 0                                                                                   | 171                                                                                 |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                               | 1810                                                                                | 1900                                                                                | 1863                                                                                | 1863                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 176                                                                               | 1321                                                                              | 21                                                                                | 15                                                                                | 477                                                                               | 0                                                                                 | 39                                                                                 | 0                                                                                   | 161                                                                                 | 55                                                                                  | 0                                                                                   | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                               | 0.92                                                                                | 0.88                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 1                                                                                 | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                  | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 656                                                                               | 1893                                                                              | 30                                                                                | 291                                                                               | 1602                                                                              | 717                                                                               | 134                                                                                | 20                                                                                  | 230                                                                                 | 404                                                                                 | 348                                                                                 | 0                                                                                   |
| Arrive On Green              | 0.08                                                                              | 0.53                                                                              | 0.53                                                                              | 0.02                                                                              | 0.46                                                                              | 0.00                                                                              | 0.19                                                                               | 0.00                                                                                | 0.19                                                                                | 0.19                                                                                | 0.00                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1792                                                                              | 3601                                                                              | 57                                                                                | 1757                                                                              | 3505                                                                              | 1568                                                                              | 193                                                                                | 105                                                                                 | 1232                                                                                | 1220                                                                                | 1863                                                                                | 0                                                                                   |
| Grp Volume(v), veh/h         | 176                                                                               | 655                                                                               | 687                                                                               | 15                                                                                | 477                                                                               | 0                                                                                 | 200                                                                                | 0                                                                                   | 0                                                                                   | 55                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1792                                                                              | 1787                                                                              | 1871                                                                              | 1757                                                                              | 1752                                                                              | 1568                                                                              | 1530                                                                               | 0                                                                                   | 0                                                                                   | 1220                                                                                | 1863                                                                                | 0                                                                                   |
| Q Serve(g_s), s              | 2.1                                                                               | 12.1                                                                              | 12.1                                                                              | 0.2                                                                               | 3.8                                                                               | 0.0                                                                               | 2.5                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 2.1                                                                               | 12.1                                                                              | 12.1                                                                              | 0.2                                                                               | 3.8                                                                               | 0.0                                                                               | 5.3                                                                                | 0.0                                                                                 | 0.0                                                                                 | 1.6                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.03                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 0.19                                                                               |                                                                                     | 0.80                                                                                | 1.00                                                                                |                                                                                     | 0.00                                                                                |
| Lane Grp Cap(c), veh/h       | 656                                                                               | 939                                                                               | 983                                                                               | 291                                                                               | 1602                                                                              | 717                                                                               | 383                                                                                | 0                                                                                   | 0                                                                                   | 404                                                                                 | 348                                                                                 | 0                                                                                   |
| V/C Ratio(X)                 | 0.27                                                                              | 0.70                                                                              | 0.70                                                                              | 0.05                                                                              | 0.30                                                                              | 0.00                                                                              | 0.52                                                                               | 0.00                                                                                | 0.00                                                                                | 0.14                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 750                                                                               | 1136                                                                              | 1190                                                                              | 424                                                                               | 2069                                                                              | 926                                                                               | 649                                                                                | 0                                                                                   | 0                                                                                   | 619                                                                                 | 677                                                                                 | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 5.0                                                                               | 7.8                                                                               | 7.8                                                                               | 7.2                                                                               | 7.5                                                                               | 0.0                                                                               | 16.7                                                                               | 0.0                                                                                 | 0.0                                                                                 | 15.2                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.2                                                                               | 1.5                                                                               | 1.4                                                                               | 0.1                                                                               | 0.1                                                                               | 0.0                                                                               | 1.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.0                                                                               | 6.2                                                                               | 6.5                                                                               | 0.1                                                                               | 1.8                                                                               | 0.0                                                                               | 2.4                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.6                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 5.2                                                                               | 9.3                                                                               | 9.2                                                                               | 7.2                                                                               | 7.6                                                                               | 0.0                                                                               | 17.8                                                                               | 0.0                                                                                 | 0.0                                                                                 | 15.3                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          | 1518                                                                              |                                                                                   |                                                                                   | 492                                                                               |                                                                                   |                                                                                   | 200                                                                                |                                                                                     |                                                                                     | 55                                                                                  |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 8.8                                                                               |                                                                                   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 17.8                                                                               |                                                                                     |                                                                                     | 15.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 2                                                                                 |                                                                                   | 3                                                                                 | 4                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 12.2                                                                              |                                                                                   | 4.7                                                                               | 27.1                                                                              | 12.2                                                                              |                                                                                   | 7.7                                                                                | 24.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 16.0                                                                              |                                                                                   | 4.0                                                                               | 28.0                                                                              | 16.0                                                                              |                                                                                   | 6.0                                                                                | 26.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 7.3                                                                               |                                                                                   | 2.2                                                                               | 14.1                                                                              | 3.6                                                                               |                                                                                   | 4.1                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.9                                                                               |                                                                                   | 0.0                                                                               | 9.0                                                                               | 1.1                                                                               |                                                                                   | 0.1                                                                                | 11.6                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 9.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 7: SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)               | 13                                                                                | 1285                                                                              | 47                                                                                | 20                                                                                | 436                                                                               | 1                                                                                 | 25                                                                                 | 0                                                                                   | 20                                                                                  | 2                                                                                   | 0                                                                                   | 8                                                                                   |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1881                                                                              | 1881                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1900                                                                               | 1881                                                                                | 1900                                                                                | 1900                                                                                | 1863                                                                                | 1900                                                                                |
| Adj Flow Rate, veh/h         | 14                                                                                | 1397                                                                              | 0                                                                                 | 23                                                                                | 507                                                                               | 0                                                                                 | 32                                                                                 | 0                                                                                   | 26                                                                                  | 3                                                                                   | 0                                                                                   | 12                                                                                  |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.77                                                                               | 0.77                                                                                | 0.77                                                                                | 0.69                                                                                | 0.69                                                                                | 0.69                                                                                |
| Percent Heavy Veh, %         | 1                                                                                 | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 778                                                                               | 1562                                                                              | 0                                                                                 | 222                                                                               | 1542                                                                              | 0                                                                                 | 86                                                                                 | 4                                                                                   | 35                                                                                  | 45                                                                                  | 8                                                                                   | 66                                                                                  |
| Arrive On Green              | 0.01                                                                              | 0.83                                                                              | 0.00                                                                              | 0.02                                                                              | 0.84                                                                              | 0.00                                                                              | 0.05                                                                               | 0.00                                                                                | 0.05                                                                                | 0.05                                                                                | 0.00                                                                                | 0.05                                                                                |
| Sat Flow, veh/h              | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1757                                                                              | 1845                                                                              | 0                                                                                 | 780                                                                                | 71                                                                                  | 692                                                                                 | 175                                                                                 | 157                                                                                 | 1328                                                                                |
| Grp Volume(v), veh/h         | 14                                                                                | 1397                                                                              | 0                                                                                 | 23                                                                                | 507                                                                               | 0                                                                                 | 58                                                                                 | 0                                                                                   | 0                                                                                   | 15                                                                                  | 0                                                                                   | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1757                                                                              | 1845                                                                              | 0                                                                                 | 1543                                                                               | 0                                                                                   | 0                                                                                   | 1660                                                                                | 0                                                                                   | 0                                                                                   |
| Q Serve(g_s), s              | 0.1                                                                               | 57.8                                                                              | 0.0                                                                               | 0.2                                                                               | 7.3                                                                               | 0.0                                                                               | 3.3                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.1                                                                               | 57.8                                                                              | 0.0                                                                               | 0.2                                                                               | 7.3                                                                               | 0.0                                                                               | 4.3                                                                                | 0.0                                                                                 | 0.0                                                                                 | 1.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.00                                                                              | 1.00                                                                              |                                                                                   | 0.00                                                                              | 0.55                                                                               |                                                                                     | 0.45                                                                                | 0.20                                                                                |                                                                                     | 0.80                                                                                |
| Lane Grp Cap(c), veh/h       | 778                                                                               | 1562                                                                              | 0                                                                                 | 222                                                                               | 1542                                                                              | 0                                                                                 | 125                                                                                | 0                                                                                   | 0                                                                                   | 120                                                                                 | 0                                                                                   | 0                                                                                   |
| V/C Ratio(X)                 | 0.02                                                                              | 0.89                                                                              | 0.00                                                                              | 0.10                                                                              | 0.33                                                                              | 0.00                                                                              | 0.47                                                                               | 0.00                                                                                | 0.00                                                                                | 0.13                                                                                | 0.00                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 816                                                                               | 1562                                                                              | 0                                                                                 | 250                                                                               | 1542                                                                              | 0                                                                                 | 252                                                                                | 0                                                                                   | 0                                                                                   | 251                                                                                 | 0                                                                                   | 0                                                                                   |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 0.00                                                                                | 0.00                                                                                | 1.00                                                                                | 0.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 1.7                                                                               | 6.6                                                                               | 0.0                                                                               | 16.4                                                                              | 2.2                                                                               | 0.0                                                                               | 55.2                                                                               | 0.0                                                                                 | 0.0                                                                                 | 53.7                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.0                                                                               | 8.3                                                                               | 0.0                                                                               | 0.2                                                                               | 0.6                                                                               | 0.0                                                                               | 2.7                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.1                                                                               | 32.7                                                                              | 0.0                                                                               | 0.4                                                                               | 3.9                                                                               | 0.0                                                                               | 2.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 1.7                                                                               | 14.9                                                                              | 0.0                                                                               | 16.6                                                                              | 2.8                                                                               | 0.0                                                                               | 57.9                                                                               | 0.0                                                                                 | 0.0                                                                                 | 54.2                                                                                | 0.0                                                                                 | 0.0                                                                                 |
| LnGrp LOS                    | A                                                                                 | B                                                                                 |                                                                                   | B                                                                                 | A                                                                                 |                                                                                   | E                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 1411                                                                              |                                                                                   |                                                                                   | 530                                                                               |                                                                                   |                                                                                    | 58                                                                                  |                                                                                     |                                                                                     | 15                                                                                  |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 3.4                                                                               |                                                                                   |                                                                                    | 57.9                                                                                |                                                                                     |                                                                                     | 54.2                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 6.1                                                                               | 102.0                                                                             |                                                                                   | 9.9                                                                               | 5.5                                                                               | 102.6                                                                             |                                                                                    | 9.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 4.0                                                                               | 98.0                                                                              |                                                                                   | 16.0                                                                              | 4.0                                                                               | 98.0                                                                              |                                                                                    | 16.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 2.2                                                                               | 59.8                                                                              |                                                                                   | 6.3                                                                               | 2.1                                                                               | 9.3                                                                               |                                                                                    | 3.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 25.2                                                                              |                                                                                   | 0.2                                                                               | 0.0                                                                               | 39.1                                                                              |                                                                                    | 0.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 13.3                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Intersection             |        |      |        |          |        |       |
|--------------------------|--------|------|--------|----------|--------|-------|
| Int Delay, s/veh         | 3.7    |      |        |          |        |       |
|                          |        |      |        |          |        |       |
| Movement                 | EBL    | EBT  | WBT    | WBR      | SWL    | SWR   |
| Vol, veh/h               | 389    | 920  | 306    | 5        | 4      | 155   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0        | 0      | 0     |
| Sign Control             | Free   | Free | Free   | Free     | Stop   | Stop  |
| RT Channelized           | -      | None | -      | None     | -      | None  |
| Storage Length           | 400    | -    | -      | -        | 0      | -     |
| Veh in Median Storage, # | -      | 0    | 0      | -        | 0      | -     |
| Grade, %                 | -      | 0    | 0      | -        | 0      | -     |
| Peak Hour Factor         | 92     | 92   | 85     | 85       | 91     | 91    |
| Heavy Vehicles, %        | 1      | 1    | 3      | 3        | 1      | 1     |
| Mvmt Flow                | 423    | 1000 | 360    | 6        | 4      | 170   |
|                          |        |      |        |          |        |       |
| Major/Minor              | Major1 |      | Major2 |          | Minor2 |       |
| Conflicting Flow All     | 366    | 0    | -      | 0        | 2209   | 363   |
| Stage 1                  | -      | -    | -      | -        | 363    | -     |
| Stage 2                  | -      | -    | -      | -        | 1846   | -     |
| Critical Hdwy            | 4.11   | -    | -      | -        | 6.41   | 6.21  |
| Critical Hdwy Stg 1      | -      | -    | -      | -        | 5.41   | -     |
| Critical Hdwy Stg 2      | -      | -    | -      | -        | 5.41   | -     |
| Follow-up Hdwy           | 2.209  | -    | -      | -        | 3.509  | 3.309 |
| Pot Cap-1 Maneuver       | 1198   | -    | -      | -        | 49     | 684   |
| Stage 1                  | -      | -    | -      | -        | 706    | -     |
| Stage 2                  | -      | -    | -      | -        | 138    | -     |
| Platoon blocked, %       |        | -    | -      | -        |        |       |
| Mov Cap-1 Maneuver       | 1198   | -    | -      | -        | 32     | 684   |
| Mov Cap-2 Maneuver       | -      | -    | -      | -        | 32     | -     |
| Stage 1                  | -      | -    | -      | -        | 706    | -     |
| Stage 2                  | -      | -    | -      | -        | 89     | -     |
|                          |        |      |        |          |        |       |
| Approach                 | EB     |      | WB     |          | SW     |       |
| HCM Control Delay, s     | 2.9    |      | 0      |          | 17.9   |       |
| HCM LOS                  | C      |      |        |          |        |       |
|                          |        |      |        |          |        |       |
| Minor Lane/Major Mvmt    | EBL    | EBT  | WBT    | WBRSWLn1 |        |       |
| Capacity (veh/h)         | 1198   | -    | -      | -        | 452    |       |
| HCM Lane V/C Ratio       | 0.353  | -    | -      | -        | 0.387  |       |
| HCM Control Delay (s)    | 9.6    | -    | -      | -        | 17.9   |       |
| HCM Lane LOS             | A      | -    | -      | -        | C      |       |
| HCM 95th %tile Q(veh)    | 1.6    | -    | -      | -        | 1.8    |       |

# HCM 2010 Signalized Intersection Summary

## 9: Silver Hill Rd & SR 236/Hugh Howell Rd

6/22/2016

|                                                                      |  |  |  |  |  |  |   |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|------|
| Movement                                                             | NBL                                                                               | NBR                                                                               | SET                                                                               | SER                                                                               | NWL                                                                               | NWT                                                                               |   |      |
| Lane Configurations                                                  |  |                                                                                   |  |                                                                                   |  |  |   |      |
| Volume (veh/h)                                                       | 63                                                                                | 15                                                                                | 887                                                                               | 227                                                                               | 12                                                                                | 296                                                                               |   |      |
| Number                                                               | 3                                                                                 | 18                                                                                | 6                                                                                 | 16                                                                                | 5                                                                                 | 2                                                                                 |   |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Adj Sat Flow, veh/h/ln                                               | 1881                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              | 1881                                                                              | 1881                                                                              |   |      |
| Adj Flow Rate, veh/h                                                 | 93                                                                                | 22                                                                                | 964                                                                               | 247                                                                               | 14                                                                                | 344                                                                               |   |      |
| Adj No. of Lanes                                                     | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Peak Hour Factor                                                     | 0.68                                                                              | 0.68                                                                              | 0.92                                                                              | 0.92                                                                              | 0.86                                                                              | 0.86                                                                              |   |      |
| Percent Heavy Veh, %                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |   |      |
| Cap, veh/h                                                           | 119                                                                               | 28                                                                                | 1089                                                                              | 279                                                                               | 233                                                                               | 1535                                                                              |   |      |
| Arrive On Green                                                      | 0.08                                                                              | 0.08                                                                              | 0.75                                                                              | 0.75                                                                              | 0.01                                                                              | 0.82                                                                              |   |      |
| Sat Flow, veh/h                                                      | 1405                                                                              | 332                                                                               | 1445                                                                              | 370                                                                               | 1792                                                                              | 1881                                                                              |   |      |
| Grp Volume(v), veh/h                                                 | 116                                                                               | 0                                                                                 | 0                                                                                 | 1211                                                                              | 14                                                                                | 344                                                                               |   |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1752                                                                              | 0                                                                                 | 0                                                                                 | 1816                                                                              | 1792                                                                              | 1881                                                                              |   |      |
| Q Serve(g_s), s                                                      | 5.2                                                                               | 0.0                                                                               | 0.0                                                                               | 39.9                                                                              | 0.1                                                                               | 3.3                                                                               |   |      |
| Cycle Q Clear(g_c), s                                                | 5.2                                                                               | 0.0                                                                               | 0.0                                                                               | 39.9                                                                              | 0.1                                                                               | 3.3                                                                               |   |      |
| Prop In Lane                                                         | 0.80                                                                              | 0.19                                                                              |                                                                                   | 0.20                                                                              | 1.00                                                                              |                                                                                   |   |      |
| Lane Grp Cap(c), veh/h                                               | 149                                                                               | 0                                                                                 | 0                                                                                 | 1368                                                                              | 233                                                                               | 1535                                                                              |   |      |
| V/C Ratio(X)                                                         | 0.78                                                                              | 0.00                                                                              | 0.00                                                                              | 0.89                                                                              | 0.06                                                                              | 0.22                                                                              |   |      |
| Avail Cap(c_a), veh/h                                                | 347                                                                               | 0                                                                                 | 0                                                                                 | 1368                                                                              | 298                                                                               | 1535                                                                              |   |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |      |
| Uniform Delay (d), s/veh                                             | 36.3                                                                              | 0.0                                                                               | 0.0                                                                               | 7.4                                                                               | 13.0                                                                              | 1.7                                                                               |   |      |
| Incr Delay (d2), s/veh                                               | 8.5                                                                               | 0.0                                                                               | 0.0                                                                               | 8.7                                                                               | 0.1                                                                               | 0.3                                                                               |   |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.9                                                                               | 0.0                                                                               | 0.0                                                                               | 22.8                                                                              | 0.2                                                                               | 1.9                                                                               |   |      |
| LnGrp Delay(d),s/veh                                                 | 44.8                                                                              | 0.0                                                                               | 0.0                                                                               | 16.1                                                                              | 13.1                                                                              | 2.0                                                                               |   |      |
| LnGrp LOS                                                            | D                                                                                 |                                                                                   |                                                                                   | B                                                                                 | B                                                                                 | A                                                                                 |   |      |
| Approach Vol, veh/h                                                  | 116                                                                               |                                                                                   | 1211                                                                              |                                                                                   |                                                                                   | 358                                                                               |   |      |
| Approach Delay, s/veh                                                | 44.8                                                                              |                                                                                   | 16.1                                                                              |                                                                                   |                                                                                   | 2.4                                                                               |   |      |
| Approach LOS                                                         | D                                                                                 |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |   |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8    |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 6                                                                                 |   | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 70.0                                                                              |                                                                                   |                                                                                   | 5.1                                                                               | 64.9                                                                              |   | 10.9 |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               | 4.0                                                                               |   | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   | 66.0                                                                              |                                                                                   |                                                                                   | 4.0                                                                               | 58.0                                                                              |   | 16.0 |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                   | 5.3                                                                               |                                                                                   |                                                                                   | 2.1                                                                               | 41.9                                                                              |   | 7.2  |
| Green Ext Time (p_c), s                                              |                                                                                   | 20.8                                                                              |                                                                                   |                                                                                   | 0.0                                                                               | 10.5                                                                              |   | 0.2  |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 15.2                                                                              |                                                                                   |                                                                                   |                                                                                   |   |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |      |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |      |

# HCM 2010 Signalized Intersection Summary

## 10: Brockett Rd & US 29/L"Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (veh/h)               | 79                                                                                | 1122                                                                              | 49                                                                                | 241                                                                               | 847                                                                               | 65                                                                                | 37                                                                                  | 87                                                                                  | 287                                                                                 | 182                                                                                 | 293                                                                                 | 140                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                   | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                | 1881                                                                                |
| Adj Flow Rate, veh/h         | 87                                                                                | 1233                                                                              | 54                                                                                | 262                                                                               | 921                                                                               | 71                                                                                | 43                                                                                  | 100                                                                                 | 330                                                                                 | 200                                                                                 | 322                                                                                 | 154                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Cap, veh/h                   | 352                                                                               | 1781                                                                              | 78                                                                                | 319                                                                               | 1865                                                                              | 144                                                                               | 180                                                                                 | 333                                                                                 | 283                                                                                 | 338                                                                                 | 440                                                                                 | 374                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.52                                                                              | 0.52                                                                              | 0.09                                                                              | 0.57                                                                              | 0.57                                                                              | 0.03                                                                                | 0.18                                                                                | 0.18                                                                                | 0.08                                                                                | 0.23                                                                                | 0.23                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3454                                                                              | 151                                                                               | 1757                                                                              | 3298                                                                              | 254                                                                               | 1792                                                                                | 1881                                                                                | 1599                                                                                | 1792                                                                                | 1881                                                                                | 1599                                                                                |
| Grp Volume(v), veh/h         | 87                                                                                | 631                                                                               | 656                                                                               | 262                                                                               | 489                                                                               | 503                                                                               | 43                                                                                  | 100                                                                                 | 330                                                                                 | 200                                                                                 | 322                                                                                 | 154                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1836                                                                              | 1757                                                                              | 1752                                                                              | 1800                                                                              | 1792                                                                                | 1881                                                                                | 1599                                                                                | 1792                                                                                | 1881                                                                                | 1599                                                                                |
| Q Serve(g_s), s              | 2.7                                                                               | 31.8                                                                              | 31.9                                                                              | 7.9                                                                               | 19.9                                                                              | 19.9                                                                              | 2.3                                                                                 | 5.5                                                                                 | 21.0                                                                                | 10.0                                                                                | 18.7                                                                                | 9.7                                                                                 |
| Cycle Q Clear(g_c), s        | 2.7                                                                               | 31.8                                                                              | 31.9                                                                              | 7.9                                                                               | 19.9                                                                              | 19.9                                                                              | 2.3                                                                                 | 5.5                                                                                 | 21.0                                                                                | 10.0                                                                                | 18.7                                                                                | 9.7                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.08                                                                              | 1.00                                                                              |                                                                                   | 0.14                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 352                                                                               | 912                                                                               | 946                                                                               | 319                                                                               | 991                                                                               | 1018                                                                              | 180                                                                                 | 333                                                                                 | 283                                                                                 | 338                                                                                 | 440                                                                                 | 374                                                                                 |
| V/C Ratio(X)                 | 0.25                                                                              | 0.69                                                                              | 0.69                                                                              | 0.82                                                                              | 0.49                                                                              | 0.49                                                                              | 0.24                                                                                | 0.30                                                                                | 1.16                                                                                | 0.59                                                                                | 0.73                                                                                | 0.41                                                                                |
| Avail Cap(c_a), veh/h        | 375                                                                               | 912                                                                               | 946                                                                               | 462                                                                               | 991                                                                               | 1018                                                                              | 191                                                                                 | 333                                                                                 | 283                                                                                 | 338                                                                                 | 440                                                                                 | 374                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 13.4                                                                              | 21.6                                                                              | 21.6                                                                              | 21.0                                                                              | 15.5                                                                              | 15.5                                                                              | 39.0                                                                                | 42.4                                                                                | 48.7                                                                                | 35.5                                                                                | 41.9                                                                                | 38.5                                                                                |
| Incr Delay (d2), s/veh       | 0.4                                                                               | 4.3                                                                               | 4.2                                                                               | 7.6                                                                               | 1.8                                                                               | 1.7                                                                               | 0.7                                                                                 | 2.3                                                                                 | 105.5                                                                               | 2.7                                                                                 | 10.3                                                                                | 3.3                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.3                                                                               | 16.5                                                                              | 17.1                                                                              | 5.3                                                                               | 10.1                                                                              | 10.4                                                                              | 1.2                                                                                 | 3.0                                                                                 | 17.6                                                                                | 1.1                                                                                 | 11.0                                                                                | 4.6                                                                                 |
| LnGrp Delay(d),s/veh         | 13.8                                                                              | 25.9                                                                              | 25.8                                                                              | 28.6                                                                              | 17.3                                                                              | 17.2                                                                              | 39.7                                                                                | 44.6                                                                                | 154.2                                                                               | 38.2                                                                                | 52.2                                                                                | 41.8                                                                                |
| LnGrp LOS                    | B                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | B                                                                                 | B                                                                                 | D                                                                                   | D                                                                                   | F                                                                                   | D                                                                                   | D                                                                                   | D                                                                                   |
| Approach Vol, veh/h          | 1374                                                                              |                                                                                   |                                                                                   |                                                                                   | 1254                                                                              |                                                                                   | 473                                                                                 |                                                                                     |                                                                                     |                                                                                     | 676                                                                                 |                                                                                     |
| Approach Delay, s/veh        | 25.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 19.6                                                                              |                                                                                   | 120.6                                                                               |                                                                                     |                                                                                     |                                                                                     | 45.7                                                                                |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   | F                                                                                   |                                                                                     |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 14.4                                                                              | 65.1                                                                              | 14.0                                                                              | 25.0                                                                              | 8.5                                                                               | 71.0                                                                              | 7.3                                                                                 | 31.7                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 20.0                                                                              | 53.0                                                                              | 10.0                                                                              | 21.0                                                                              | 6.0                                                                               | 67.0                                                                              | 4.0                                                                                 | 27.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 9.9                                                                               | 33.9                                                                              | 12.0                                                                              | 23.0                                                                              | 4.7                                                                               | 21.9                                                                              | 4.3                                                                                 | 20.7                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.5                                                                               | 13.4                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 22.6                                                                              | 0.0                                                                                 | 2.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 38.9                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 11: Idlewood Rd/Main St & US 29/L'Ville Hwy

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (veh/h)               | 68                                                                                | 1140                                                                              | 145                                                                               | 188                                                                               | 919                                                                               | 76                                                                                | 66                                                                                 | 108                                                                                 | 182                                                                                 | 151                                                                                 | 252                                                                                 | 135                                                                                 |
| Number                       | 5                                                                                 | 2                                                                                 | 12                                                                                | 1                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                  | 4                                                                                   | 14                                                                                  | 3                                                                                   | 8                                                                                   | 18                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1900                                                                              | 1845                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                               | 1881                                                                                | 1900                                                                                | 1863                                                                                | 1863                                                                                | 1863                                                                                |
| Adj Flow Rate, veh/h         | 79                                                                                | 1326                                                                              | 169                                                                               | 219                                                                               | 1069                                                                              | 88                                                                                | 80                                                                                 | 130                                                                                 | 219                                                                                 | 164                                                                                 | 274                                                                                 | 147                                                                                 |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.83                                                                               | 0.83                                                                                | 0.83                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Cap, veh/h                   | 290                                                                               | 1503                                                                              | 190                                                                               | 260                                                                               | 1704                                                                              | 140                                                                               | 240                                                                                | 121                                                                                 | 204                                                                                 | 202                                                                                 | 401                                                                                 | 340                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.48                                                                              | 0.48                                                                              | 0.08                                                                              | 0.52                                                                              | 0.52                                                                              | 0.05                                                                               | 0.19                                                                                | 0.19                                                                                | 0.07                                                                                | 0.22                                                                                | 0.22                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3161                                                                              | 400                                                                               | 1757                                                                              | 3280                                                                              | 270                                                                               | 1792                                                                               | 631                                                                                 | 1063                                                                                | 1774                                                                                | 1863                                                                                | 1583                                                                                |
| Grp Volume(v), veh/h         | 79                                                                                | 739                                                                               | 756                                                                               | 219                                                                               | 571                                                                               | 586                                                                               | 80                                                                                 | 0                                                                                   | 349                                                                                 | 164                                                                                 | 274                                                                                 | 147                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1792                                                                              | 1757                                                                              | 1752                                                                              | 1797                                                                              | 1792                                                                               | 0                                                                                   | 1694                                                                                | 1774                                                                                | 1863                                                                                | 1583                                                                                |
| Q Serve(g_s), s              | 2.0                                                                               | 33.2                                                                              | 33.8                                                                              | 5.3                                                                               | 20.5                                                                              | 20.5                                                                              | 3.1                                                                                | 0.0                                                                                 | 17.0                                                                                | 6.0                                                                                 | 12.0                                                                                | 7.1                                                                                 |
| Cycle Q Clear(g_c), s        | 2.0                                                                               | 33.2                                                                              | 33.8                                                                              | 5.3                                                                               | 20.5                                                                              | 20.5                                                                              | 3.1                                                                                | 0.0                                                                                 | 17.0                                                                                | 6.0                                                                                 | 12.0                                                                                | 7.1                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 0.22                                                                              | 1.00                                                                              |                                                                                   | 0.15                                                                              | 1.00                                                                               |                                                                                     | 0.63                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 290                                                                               | 841                                                                               | 852                                                                               | 260                                                                               | 911                                                                               | 934                                                                               | 240                                                                                | 0                                                                                   | 326                                                                                 | 202                                                                                 | 401                                                                                 | 340                                                                                 |
| V/C Ratio(X)                 | 0.27                                                                              | 0.88                                                                              | 0.89                                                                              | 0.84                                                                              | 0.63                                                                              | 0.63                                                                              | 0.33                                                                               | 0.00                                                                                | 1.07                                                                                | 0.81                                                                                | 0.68                                                                                | 0.43                                                                                |
| Avail Cap(c_a), veh/h        | 341                                                                               | 841                                                                               | 852                                                                               | 292                                                                               | 911                                                                               | 934                                                                               | 240                                                                                | 0                                                                                   | 326                                                                                 | 202                                                                                 | 401                                                                                 | 340                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 12.8                                                                              | 20.9                                                                              | 21.0                                                                              | 19.2                                                                              | 15.1                                                                              | 15.1                                                                              | 27.5                                                                               | 0.0                                                                                 | 35.7                                                                                | 29.5                                                                                | 31.9                                                                                | 30.0                                                                                |
| Incr Delay (d2), s/veh       | 0.5                                                                               | 12.5                                                                              | 13.2                                                                              | 18.0                                                                              | 1.4                                                                               | 1.3                                                                               | 0.8                                                                                | 0.0                                                                                 | 70.0                                                                                | 21.6                                                                                | 4.7                                                                                 | 0.9                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.0                                                                               | 18.9                                                                              | 19.7                                                                              | 4.0                                                                               | 10.2                                                                              | 10.4                                                                              | 1.6                                                                                | 0.0                                                                                 | 14.2                                                                                | 2.3                                                                                 | 6.7                                                                                 | 3.2                                                                                 |
| LnGrp Delay(d),s/veh         | 13.3                                                                              | 33.4                                                                              | 34.3                                                                              | 37.2                                                                              | 16.5                                                                              | 16.5                                                                              | 28.3                                                                               | 0.0                                                                                 | 105.6                                                                               | 51.1                                                                                | 36.7                                                                                | 30.9                                                                                |
| LnGrp LOS                    | B                                                                                 | C                                                                                 | C                                                                                 | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                  |                                                                                     | F                                                                                   | D                                                                                   | D                                                                                   | C                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 1574                                                                              |                                                                                   |                                                                                   | 1376                                                                              |                                                                                   |                                                                                    | 429                                                                                 |                                                                                     |                                                                                     | 585                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 32.8                                                                              |                                                                                   |                                                                                   | 19.8                                                                              |                                                                                   |                                                                                    | 91.2                                                                                |                                                                                     |                                                                                     | 39.3                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 11.4                                                                              | 46.0                                                                              | 10.0                                                                              | 21.0                                                                              | 7.4                                                                               | 49.9                                                                              | 8.0                                                                                | 23.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 9.0                                                                               | 42.0                                                                              | 6.0                                                                               | 17.0                                                                              | 6.0                                                                               | 45.0                                                                              | 4.0                                                                                | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 7.3                                                                               | 35.8                                                                              | 8.0                                                                               | 19.0                                                                              | 4.0                                                                               | 22.5                                                                              | 5.1                                                                                | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.1                                                                               | 5.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 17.5                                                                              | 0.0                                                                                | 1.9                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 35.6                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 12: SR 236/Hugh Howell Rd & Silver Hill Rd

6/22/2016

|                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |     |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|-----|
|                              |  |  |  |  |  |  |   |     |
| Movement                     | WBL                                                                               | WBR                                                                               | SEL                                                                               | SET                                                                               | NWT                                                                               | NWR                                                                               |   |     |
| Lane Configurations          |  |  |  |  |  |  |   |     |
| Volume (veh/h)               | 19                                                                                | 53                                                                                | 104                                                                               | 800                                                                               | 261                                                                               | 36                                                                                |   |     |
| Number                       | 3                                                                                 | 18                                                                                | 1                                                                                 | 6                                                                                 | 2                                                                                 | 12                                                                                |   |     |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |     |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |   |     |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |     |
| Adj Sat Flow, veh/h/ln       | 1845                                                                              | 1845                                                                              | 1881                                                                              | 1881                                                                              | 1881                                                                              | 1900                                                                              |   |     |
| Adj Flow Rate, veh/h         | 30                                                                                | 0                                                                                 | 113                                                                               | 870                                                                               | 297                                                                               | 41                                                                                |   |     |
| Adj No. of Lanes             | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 |   |     |
| Peak Hour Factor             | 0.63                                                                              | 0.63                                                                              | 0.92                                                                              | 0.92                                                                              | 0.88                                                                              | 0.88                                                                              |   |     |
| Percent Heavy Veh, %         | 3                                                                                 | 3                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |   |     |
| Cap, veh/h                   | 49                                                                                | 44                                                                                | 865                                                                               | 1496                                                                              | 1036                                                                              | 143                                                                               |   |     |
| Arrive On Green              | 0.03                                                                              | 0.00                                                                              | 0.07                                                                              | 0.80                                                                              | 0.64                                                                              | 0.64                                                                              |   |     |
| Sat Flow, veh/h              | 1757                                                                              | 1568                                                                              | 1792                                                                              | 1881                                                                              | 1618                                                                              | 223                                                                               |   |     |
| Grp Volume(v), veh/h         | 30                                                                                | 0                                                                                 | 113                                                                               | 870                                                                               | 0                                                                                 | 338                                                                               |   |     |
| Grp Sat Flow(s),veh/h/ln     | 1757                                                                              | 1568                                                                              | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1842                                                                              |   |     |
| Q Serve(g_s), s              | 0.8                                                                               | 0.0                                                                               | 0.8                                                                               | 8.0                                                                               | 0.0                                                                               | 3.7                                                                               |   |     |
| Cycle Q Clear(g_c), s        | 0.8                                                                               | 0.0                                                                               | 0.8                                                                               | 8.0                                                                               | 0.0                                                                               | 3.7                                                                               |   |     |
| Prop In Lane                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 0.12                                                                              |   |     |
| Lane Grp Cap(c), veh/h       | 49                                                                                | 44                                                                                | 865                                                                               | 1496                                                                              | 0                                                                                 | 1179                                                                              |   |     |
| V/C Ratio(X)                 | 0.61                                                                              | 0.00                                                                              | 0.13                                                                              | 0.58                                                                              | 0.00                                                                              | 0.29                                                                              |   |     |
| Avail Cap(c_a), veh/h        | 155                                                                               | 139                                                                               | 943                                                                               | 1496                                                                              | 0                                                                                 | 1179                                                                              |   |     |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |     |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              |   |     |
| Uniform Delay (d), s/veh     | 21.8                                                                              | 0.0                                                                               | 1.9                                                                               | 1.8                                                                               | 0.0                                                                               | 3.6                                                                               |   |     |
| Incr Delay (d2), s/veh       | 11.9                                                                              | 0.0                                                                               | 0.1                                                                               | 1.7                                                                               | 0.0                                                                               | 0.6                                                                               |   |     |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |     |
| %ile BackOfQ(50%),veh/ln     | 0.5                                                                               | 0.0                                                                               | 0.3                                                                               | 4.6                                                                               | 0.0                                                                               | 2.0                                                                               |   |     |
| LnGrp Delay(d),s/veh         | 33.7                                                                              | 0.0                                                                               | 2.0                                                                               | 3.4                                                                               | 0.0                                                                               | 4.2                                                                               |   |     |
| LnGrp LOS                    | C                                                                                 |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 |   |     |
| Approach Vol, veh/h          | 30                                                                                |                                                                                   |                                                                                   | 983                                                                               | 338                                                                               |                                                                                   |   |     |
| Approach Delay, s/veh        | 33.7                                                                              |                                                                                   |                                                                                   | 3.2                                                                               | 4.2                                                                               |                                                                                   |   |     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |   |     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8   |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |   | 8   |
| Phs Duration (G+Y+Rc), s     | 7.0                                                                               | 33.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 40.0                                                                              |   | 5.3 |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |   | 4.0 |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 27.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.0                                                                              |   | 4.0 |
| Max Q Clear Time (g_c+l1), s | 2.8                                                                               | 5.7                                                                               |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                              |   | 2.8 |
| Green Ext Time (p_c), s      | 0.0                                                                               | 8.2                                                                               |                                                                                   |                                                                                   |                                                                                   | 8.9                                                                               |   | 0.0 |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 4.2                                                                               |                                                                                   |                                                                                   |                                                                                   |   |     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |     |

Intersection

Int Delay, s/veh 14.3

| Movement                 | WBL  | WBR   | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|-------|------|------|------|------|
| Vol, veh/h               | 70   | 69    | 1009 | 59   | 62   | 1461 |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free | Free | Free |
| RT Channelized           | -    | Yield | -    | None | -    | None |
| Storage Length           | 0    | 0     | -    | 150  | 150  | -    |
| Veh in Median Storage, # | 0    | -     | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -     | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92    | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2     | 6    | 6    | 5    | 5    |
| Mvmt Flow                | 76   | 75    | 1097 | 64   | 67   | 1588 |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2026   | 548    | 0      |
| Stage 1              | 1097   | -      | -      |
| Stage 2              | 929    | -      | -      |
| Critical Hdwy        | 6.84   | 6.94   | 4.2    |
| Critical Hdwy Stg 1  | 5.84   | -      | -      |
| Critical Hdwy Stg 2  | 5.84   | -      | -      |
| Follow-up Hdwy       | 3.52   | 3.32   | 2.25   |
| Pot Cap-1 Maneuver   | ~ 50   | 480    | 615    |
| Stage 1              | 281    | -      | -      |
| Stage 2              | 345    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | ~ 45   | 480    | 615    |
| Mov Cap-2 Maneuver   | ~ 45   | -      | -      |
| Stage 1              | 281    | -      | -      |
| Stage 2              | 307    | -      | -      |

| Approach             | WB    | NB | SB  |
|----------------------|-------|----|-----|
| HCM Control Delay, s | 274.8 | 0  | 0.5 |
| HCM LOS              | F     |    |     |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1  | WBLn2 | SBL  | SBT |
|-----------------------|-----|-----|--------|-------|------|-----|
| Capacity (veh/h)      | -   | -   | 45     | 480   | 615  | -   |
| HCM Lane V/C Ratio    | -   | -   | 1.691  | 0.156 | 0.11 | -   |
| HCM Control Delay (s) | -   | -   | \$ 532 | 13.9  | 11.6 | -   |
| HCM Lane LOS          | -   | -   | F      | B     | B    | -   |
| HCM 95th %tile Q(veh) | -   | -   | 7.6    | 0.6   | 0.4  | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

**Intersection**

Int Delay, s/veh 0.4

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 7    | 21   | 1073 | 6    | 19   | 1517 |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 150  | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 6    | 6    | 4    | 4    |
| Mvmt Flow                | 8    | 23   | 1166 | 7    | 21   | 1649 |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2036   | 586    | 0      |
| Stage 1              | 1170   | -      | -      |
| Stage 2              | 866    | -      | -      |
| Critical Hdwy        | 6.84   | 6.94   | 4.18   |
| Critical Hdwy Stg 1  | 5.84   | -      | -      |
| Critical Hdwy Stg 2  | 5.84   | -      | -      |
| Follow-up Hdwy       | 3.52   | 3.32   | 2.24   |
| Pot Cap-1 Maneuver   | 49     | 454    | 580    |
| Stage 1              | 257    | -      | -      |
| Stage 2              | 372    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 47     | 454    | 580    |
| Mov Cap-2 Maneuver   | 47     | -      | -      |
| Stage 1              | 257    | -      | -      |
| Stage 2              | 359    | -      | -      |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 36.9 | 0  | 0.1 |
| HCM LOS              | E    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 143   | 580   |
| HCM Lane V/C Ratio    | -   | -        | 0.213 | 0.036 |
| HCM Control Delay (s) | -   | -        | 36.9  | 11.4  |
| HCM Lane LOS          | -   | -        | E     | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.8   | 0.1   |

**Intersection**

Int Delay, s/veh 1.7

| Movement                 | EBL  | EBT  | WBT  | WBR   | SBL  | SBR   |
|--------------------------|------|------|------|-------|------|-------|
| Vol, veh/h               | 109  | 1335 | 657  | 11    | 20   | 118   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0     | 0    | 0     |
| Sign Control             | Free | Free | Free | Free  | Stop | Stop  |
| RT Channelized           | -    | None | -    | Yield | -    | Yield |
| Storage Length           | 150  | -    | -    | 150   | 0    | 0     |
| Veh in Median Storage, # | -    | 0    | 0    | -     | 0    | -     |
| Grade, %                 | -    | 0    | 0    | -     | 0    | -     |
| Peak Hour Factor         | 92   | 92   | 92   | 92    | 92   | 92    |
| Heavy Vehicles, %        | 1    | 1    | 3    | 3     | 2    | 2     |
| Mvmt Flow                | 118  | 1451 | 714  | 12    | 22   | 128   |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 714    | 0      | 1677   |
| Stage 1              | -      | -      | 714    |
| Stage 2              | -      | -      | 963    |
| Critical Hdwy        | 4.12   | -      | 6.84   |
| Critical Hdwy Stg 1  | -      | -      | 5.84   |
| Critical Hdwy Stg 2  | -      | -      | 5.84   |
| Follow-up Hdwy       | 2.21   | -      | 3.52   |
| Pot Cap-1 Maneuver   | 889    | -      | 86     |
| Stage 1              | -      | -      | 446    |
| Stage 2              | -      | -      | 331    |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 889    | -      | 75     |
| Mov Cap-2 Maneuver   | -      | -      | 75     |
| Stage 1              | -      | -      | 446    |
| Stage 2              | -      | -      | 287    |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.7 | 0  | 20.6 |
| HCM LOS              |     |    | C    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h)      | 889   | -   | -   | -   | 75    | 639   |
| HCM Lane V/C Ratio    | 0.133 | -   | -   | -   | 0.29  | 0.201 |
| HCM Control Delay (s) | 9.7   | -   | -   | -   | 71.5  | 12    |
| HCM Lane LOS          | A     | -   | -   | -   | F     | B     |
| HCM 95th %tile Q(veh) | 0.5   | -   | -   | -   | 1.1   | 0.7   |

| Intersection             |        |      |        |       |        |       |
|--------------------------|--------|------|--------|-------|--------|-------|
| Int Delay, s/veh         | 0.2    |      |        |       |        |       |
| Movement                 | EBL    | EBT  | WBT    | WBR   | SBL    | SBR   |
| Vol, veh/h               | 19     | 1319 | 464    | 5     | 7      | 20    |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0     | 0      | 0     |
| Sign Control             | Free   | Free | Free   | Free  | Stop   | Stop  |
| RT Channelized           | -      | None | -      | Yield | -      | Yield |
| Storage Length           | 150    | -    | -      | 150   | 0      | -     |
| Veh in Median Storage, # | -      | 0    | 0      | -     | 0      | -     |
| Grade, %                 | -      | 0    | 0      | -     | 0      | -     |
| Peak Hour Factor         | 92     | 92   | 92     | 92    | 92     | 92    |
| Heavy Vehicles, %        | 1      | 1    | 3      | 3     | 2      | 2     |
| Mvmt Flow                | 21     | 1434 | 504    | 5     | 8      | 22    |
| Major/Minor              | Major1 |      | Major2 |       | Minor2 |       |
| Conflicting Flow All     | 504    | 0    | -      | 0     | 1262   | 252   |
| Stage 1                  | -      | -    | -      | -     | 504    | -     |
| Stage 2                  | -      | -    | -      | -     | 758    | -     |
| Critical Hdwy            | 4.12   | -    | -      | -     | 6.84   | 6.94  |
| Critical Hdwy Stg 1      | -      | -    | -      | -     | 5.84   | -     |
| Critical Hdwy Stg 2      | -      | -    | -      | -     | 5.84   | -     |
| Follow-up Hdwy           | 2.21   | -    | -      | -     | 3.52   | 3.32  |
| Pot Cap-1 Maneuver       | 1064   | -    | -      | -     | 162    | 748   |
| Stage 1                  | -      | -    | -      | -     | 572    | -     |
| Stage 2                  | -      | -    | -      | -     | 423    | -     |
| Platoon blocked, %       | -      | -    | -      | -     | -      | -     |
| Mov Cap-1 Maneuver       | 1064   | -    | -      | -     | 159    | 748   |
| Mov Cap-2 Maneuver       | -      | -    | -      | -     | 159    | -     |
| Stage 1                  | -      | -    | -      | -     | 572    | -     |
| Stage 2                  | -      | -    | -      | -     | 415    | -     |
| Approach                 | EB     |      | WB     |       | SB     |       |
| HCM Control Delay, s     | 0.1    |      | 0      |       | 11.2   |       |
| HCM LOS                  |        |      |        |       | B      |       |
| Minor Lane/Major Mvmt    | EBL    | EBT  | WBT    | WBR   | SBLn1  |       |
| Capacity (veh/h)         | 1064   | -    | -      | -     | 613    |       |
| HCM Lane V/C Ratio       | 0.019  | -    | -      | -     | 0.048  |       |
| HCM Control Delay (s)    | 8.4    | -    | -      | -     | 11.2   |       |
| HCM Lane LOS             | A      | -    | -      | -     | B      |       |
| HCM 95th %tile Q(veh)    | 0.1    | -    | -      | -     | 0.2    |       |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/22/2016

|                                                                      |  |      |     |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------|------|-----|------|------|------|------|------|------|------|------|------|
| Movement                                                             | EBL                                                                                | EBT  | EBR | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations                                                  |                                                                                    |      |     |      | ↔    | ↗    | ↖    | ↑↑   |      |      | ↑↑↑  |      |
| Volume (veh/h)                                                       | 0                                                                                  | 0    | 0   | 106  | 0    | 556  | 351  | 1954 | 0    | 0    | 774  | 897  |
| Number                                                               |                                                                                    |      |     | 3    | 8    | 18   | 5    | 2    | 12   | 1    | 6    | 16   |
| Initial Q (Qb), veh                                                  |                                                                                    |      |     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Ped-Bike Adj(A_pbT)                                                  |                                                                                    |      |     | 1.00 |      | 1.00 | 1.00 |      | 1.00 | 1.00 |      | 1.00 |
| Parking Bus, Adj                                                     |                                                                                    |      |     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln                                               |                                                                                    |      |     | 1976 | 1863 | 1863 | 1792 | 1792 | 0    | 0    | 1776 | 1900 |
| Adj Flow Rate, veh/h                                                 |                                                                                    |      |     | 0    | 0    | 749  | 393  | 2188 | 0    | 0    | 867  | 0    |
| Adj No. of Lanes                                                     |                                                                                    |      |     | 0    | 1    | 2    | 1    | 2    | 0    | 0    | 3    | 0    |
| Peak Hour Factor                                                     |                                                                                    |      |     | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, %                                                 |                                                                                    |      |     | 2    | 2    | 2    | 6    | 6    | 0    | 0    | 7    | 7    |
| Cap, veh/h                                                           |                                                                                    |      |     | 0    | 397  | 676  | 562  | 2316 | 0    | 0    | 2373 | 0    |
| Arrive On Green                                                      |                                                                                    |      |     | 0.00 | 0.00 | 0.21 | 0.14 | 0.68 | 0.00 | 0.00 | 0.49 | 0.00 |
| Sat Flow, veh/h                                                      |                                                                                    |      |     | 0    | 1863 | 3167 | 1707 | 3495 | 0    | 0    | 5167 | 0    |
| Grp Volume(v), veh/h                                                 |                                                                                    |      |     | 0    | 0    | 749  | 393  | 2188 | 0    | 0    | 867  | 0    |
| Grp Sat Flow(s),veh/h/ln                                             |                                                                                    |      |     | 0    | 1863 | 1583 | 1707 | 1703 | 0    | 0    | 1616 | 0    |
| Q Serve(g_s), s                                                      |                                                                                    |      |     | 0.0  | 0.0  | 16.0 | 7.8  | 43.1 | 0.0  | 0.0  | 8.3  | 0.0  |
| Cycle Q Clear(g_c), s                                                |                                                                                    |      |     | 0.0  | 0.0  | 16.0 | 7.8  | 43.1 | 0.0  | 0.0  | 8.3  | 0.0  |
| Prop In Lane                                                         |                                                                                    |      |     | 0.00 |      | 1.00 | 1.00 |      | 0.00 | 0.00 |      | 0.00 |
| Lane Grp Cap(c), veh/h                                               |                                                                                    |      |     | 0    | 397  | 676  | 562  | 2316 | 0    | 0    | 2373 | 0    |
| V/C Ratio(X)                                                         |                                                                                    |      |     | 0.00 | 0.00 | 1.11 | 0.70 | 0.94 | 0.00 | 0.00 | 0.37 | 0.00 |
| Avail Cap(c_a), veh/h                                                |                                                                                    |      |     | 0    | 397  | 676  | 646  | 2316 | 0    | 0    | 2373 | 0    |
| HCM Platoon Ratio                                                    |                                                                                    |      |     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I)                                                   |                                                                                    |      |     | 0.00 | 0.00 | 1.00 | 0.51 | 0.51 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh                                             |                                                                                    |      |     | 0.0  | 0.0  | 29.5 | 7.8  | 10.7 | 0.0  | 0.0  | 11.9 | 0.0  |
| Incr Delay (d2), s/veh                                               |                                                                                    |      |     | 0.0  | 0.0  | 68.4 | 1.5  | 5.5  | 0.0  | 0.0  | 0.4  | 0.0  |
| Initial Q Delay(d3),s/veh                                            |                                                                                    |      |     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| %ile BackOfQ(50%),veh/ln                                             |                                                                                    |      |     | 0.0  | 0.0  | 13.4 | 3.8  | 21.5 | 0.0  | 0.0  | 3.8  | 0.0  |
| LnGrp Delay(d),s/veh                                                 |                                                                                    |      |     | 0.0  | 0.0  | 97.9 | 9.3  | 16.3 | 0.0  | 0.0  | 12.3 | 0.0  |
| LnGrp LOS                                                            |                                                                                    |      |     |      |      | F    | A    | B    |      |      | B    |      |
| Approach Vol, veh/h                                                  |                                                                                    |      |     |      | 749  |      |      | 2581 |      |      | 867  |      |
| Approach Delay, s/veh                                                |                                                                                    |      |     |      | 97.9 |      |      | 15.2 |      |      | 12.3 |      |
| Approach LOS                                                         |                                                                                    |      |     |      | F    |      |      | B    |      |      | B    |      |
| Timer                                                                | 1                                                                                  | 2    | 3   | 4    | 5    | 6    | 7    | 8    |      |      |      |      |
| Assigned Phs                                                         |                                                                                    | 2    |     |      | 5    | 6    |      | 8    |      |      |      |      |
| Phs Duration (G+Y+Rc), s                                             |                                                                                    | 55.0 |     |      | 14.3 | 40.7 |      | 20.0 |      |      |      |      |
| Change Period (Y+Rc), s                                              |                                                                                    | 4.0  |     |      | 4.0  | 4.0  |      | 4.0  |      |      |      |      |
| Max Green Setting (Gmax), s                                          |                                                                                    | 51.0 |     |      | 14.0 | 33.0 |      | 16.0 |      |      |      |      |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                    | 45.1 |     |      | 9.8  | 10.3 |      | 18.0 |      |      |      |      |
| Green Ext Time (p_c), s                                              |                                                                                    | 5.7  |     |      | 0.5  | 20.4 |      | 0.0  |      |      |      |      |
| <b>Intersection Summary</b>                                          |                                                                                    |      |     |      |      |      |      |      |      |      |      |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                    |      |     | 29.4 |      |      |      |      |      |      |      |      |
| HCM 2010 LOS                                                         |                                                                                    |      |     | C    |      |      |      |      |      |      |      |      |
| <b>Notes</b>                                                         |                                                                                    |      |     |      |      |      |      |      |      |      |      |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                    |      |     |      |      |      |      |      |      |      |      |      |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |  |   |    |  |  |  |  |
| Volume (veh/h)               | 64                                                                                | 259                                                                               | 141                                                                               | 357                                                                               | 998                                                                               | 155                                                                               | 333                                                                                | 1104                                                                                | 255                                                                                 | 107                                                                                 | 974                                                                                 | 67                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                  | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1792                                                                              | 1792                                                                              | 1792                                                                              | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1810                                                                               | 1810                                                                                | 1810                                                                                | 1792                                                                                | 1792                                                                                | 1792                                                                                |
| Adj Flow Rate, veh/h         | 70                                                                                | 282                                                                               | 0                                                                                 | 388                                                                               | 1085                                                                              | 0                                                                                 | 366                                                                                | 1213                                                                                | 0                                                                                   | 116                                                                                 | 1059                                                                                | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 1                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 6                                                                                 | 6                                                                                 | 6                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Cap, veh/h                   | 156                                                                               | 707                                                                               | 316                                                                               | 471                                                                               | 1062                                                                              | 475                                                                               | 357                                                                                | 1452                                                                                | 649                                                                                 | 222                                                                                 | 1097                                                                                | 491                                                                                 |
| Arrive On Green              | 0.04                                                                              | 0.21                                                                              | 0.00                                                                              | 0.14                                                                              | 0.30                                                                              | 0.00                                                                              | 0.16                                                                               | 0.42                                                                                | 0.00                                                                                | 0.06                                                                                | 0.32                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1707                                                                              | 3406                                                                              | 1524                                                                              | 3442                                                                              | 3539                                                                              | 1583                                                                              | 1723                                                                               | 3438                                                                                | 1538                                                                                | 1707                                                                                | 3406                                                                                | 1524                                                                                |
| Grp Volume(v), veh/h         | 70                                                                                | 282                                                                               | 0                                                                                 | 388                                                                               | 1085                                                                              | 0                                                                                 | 366                                                                                | 1213                                                                                | 0                                                                                   | 116                                                                                 | 1059                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1707                                                                              | 1703                                                                              | 1524                                                                              | 1721                                                                              | 1770                                                                              | 1583                                                                              | 1723                                                                               | 1719                                                                                | 1538                                                                                | 1707                                                                                | 1703                                                                                | 1524                                                                                |
| Q Serve(g_s), s              | 2.9                                                                               | 6.4                                                                               | 0.0                                                                               | 9.9                                                                               | 27.0                                                                              | 0.0                                                                               | 14.0                                                                               | 28.3                                                                                | 0.0                                                                                 | 4.1                                                                                 | 27.5                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 2.9                                                                               | 6.4                                                                               | 0.0                                                                               | 9.9                                                                               | 27.0                                                                              | 0.0                                                                               | 14.0                                                                               | 28.3                                                                                | 0.0                                                                                 | 4.1                                                                                 | 27.5                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 156                                                                               | 707                                                                               | 316                                                                               | 471                                                                               | 1062                                                                              | 475                                                                               | 357                                                                                | 1452                                                                                | 649                                                                                 | 222                                                                                 | 1097                                                                                | 491                                                                                 |
| V/C Ratio(X)                 | 0.45                                                                              | 0.40                                                                              | 0.00                                                                              | 0.82                                                                              | 1.02                                                                              | 0.00                                                                              | 1.03                                                                               | 0.84                                                                                | 0.00                                                                                | 0.52                                                                                | 0.97                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 156                                                                               | 707                                                                               | 316                                                                               | 574                                                                               | 1062                                                                              | 475                                                                               | 357                                                                                | 1452                                                                                | 649                                                                                 | 222                                                                                 | 1097                                                                                | 491                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 28.2                                                                              | 30.8                                                                              | 0.0                                                                               | 37.8                                                                              | 31.5                                                                              | 0.0                                                                               | 25.1                                                                               | 23.2                                                                                | 0.0                                                                                 | 21.5                                                                                | 30.0                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 2.0                                                                               | 0.4                                                                               | 0.0                                                                               | 8.0                                                                               | 33.3                                                                              | 0.0                                                                               | 54.7                                                                               | 5.8                                                                                 | 0.0                                                                                 | 2.2                                                                                 | 20.0                                                                                | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.4                                                                               | 3.1                                                                               | 0.0                                                                               | 5.2                                                                               | 18.0                                                                              | 0.0                                                                               | 14.2                                                                               | 14.5                                                                                | 0.0                                                                                 | 2.0                                                                                 | 16.0                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 30.2                                                                              | 31.2                                                                              | 0.0                                                                               | 45.8                                                                              | 64.8                                                                              | 0.0                                                                               | 79.7                                                                               | 29.1                                                                                | 0.0                                                                                 | 23.7                                                                                | 50.0                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | F                                                                                 |                                                                                   | F                                                                                  | C                                                                                   |                                                                                     | C                                                                                   | D                                                                                   |                                                                                     |
| Approach Vol, veh/h          |                                                                                   | 352                                                                               |                                                                                   |                                                                                   | 1473                                                                              |                                                                                   |                                                                                    | 1579                                                                                |                                                                                     |                                                                                     | 1175                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 31.0                                                                              |                                                                                   |                                                                                   | 59.8                                                                              |                                                                                   |                                                                                    | 40.8                                                                                |                                                                                     |                                                                                     | 47.4                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.0                                                                               | 42.0                                                                              | 16.3                                                                              | 22.7                                                                              | 18.0                                                                              | 33.0                                                                              | 8.0                                                                                | 31.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.0                                                                               | 38.0                                                                              | 15.0                                                                              | 16.0                                                                              | 14.0                                                                              | 29.0                                                                              | 4.0                                                                                | 27.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 6.1                                                                               | 30.3                                                                              | 11.9                                                                              | 8.4                                                                               | 16.0                                                                              | 29.5                                                                              | 4.9                                                                                | 29.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 6.5                                                                               | 0.4                                                                               | 4.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          |                                                                                   |                                                                                   | 47.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 8: SR 236/Hugh Howell Rd & Rosser Rd

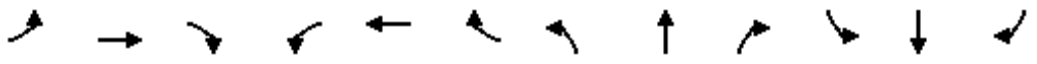
6/22/2016

|                                                                      |  |  |  |  |  |  |   |   |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|---|
| Movement                                                             | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR                                                                               | SWL                                                                               | SWR                                                                               |   |   |
| Lane Configurations                                                  |  |  |  |                                                                                   |  |  |   |   |
| Volume (veh/h)                                                       | 72                                                                                | 231                                                                               | 802                                                                               | 5                                                                                 | 7                                                                                 | 435                                                                               |   |   |
| Number                                                               | 5                                                                                 | 2                                                                                 | 6                                                                                 | 16                                                                                | 7                                                                                 | 14                                                                                |   |   |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |   |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |   |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |   |
| Adj Sat Flow, veh/h/ln                                               | 1845                                                                              | 1845                                                                              | 1863                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              |   |   |
| Adj Flow Rate, veh/h                                                 | 80                                                                                | 257                                                                               | 978                                                                               | 6                                                                                 | 8                                                                                 | 524                                                                               |   |   |
| Adj No. of Lanes                                                     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |   |   |
| Peak Hour Factor                                                     | 0.90                                                                              | 0.90                                                                              | 0.82                                                                              | 0.82                                                                              | 0.83                                                                              | 0.83                                                                              |   |   |
| Percent Heavy Veh, %                                                 | 3                                                                                 | 3                                                                                 | 2                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 |   |   |
| Cap, veh/h                                                           | 189                                                                               | 1191                                                                              | 1037                                                                              | 6                                                                                 | 6                                                                                 | 414                                                                               |   |   |
| Arrive On Green                                                      | 0.04                                                                              | 0.65                                                                              | 0.56                                                                              | 0.56                                                                              | 0.26                                                                              | 0.26                                                                              |   |   |
| Sat Flow, veh/h                                                      | 1757                                                                              | 1845                                                                              | 1849                                                                              | 11                                                                                | 24                                                                                | 1575                                                                              |   |   |
| Grp Volume(v), veh/h                                                 | 80                                                                                | 257                                                                               | 0                                                                                 | 984                                                                               | 533                                                                               | 0                                                                                 |   |   |
| Grp Sat Flow(s),veh/h/ln                                             | 1757                                                                              | 1845                                                                              | 0                                                                                 | 1861                                                                              | 1602                                                                              | 0                                                                                 |   |   |
| Q Serve(g_s), s                                                      | 1.6                                                                               | 5.0                                                                               | 0.0                                                                               | 43.1                                                                              | 23.0                                                                              | 0.0                                                                               |   |   |
| Cycle Q Clear(g_c), s                                                | 1.6                                                                               | 5.0                                                                               | 0.0                                                                               | 43.1                                                                              | 23.0                                                                              | 0.0                                                                               |   |   |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   |                                                                                   | 0.01                                                                              | 0.02                                                                              | 0.98                                                                              |   |   |
| Lane Grp Cap(c), veh/h                                               | 189                                                                               | 1191                                                                              | 0                                                                                 | 1044                                                                              | 421                                                                               | 0                                                                                 |   |   |
| V/C Ratio(X)                                                         | 0.42                                                                              | 0.22                                                                              | 0.00                                                                              | 0.94                                                                              | 1.27                                                                              | 0.00                                                                              |   |   |
| Avail Cap(c_a), veh/h                                                | 201                                                                               | 1244                                                                              | 0                                                                                 | 1084                                                                              | 421                                                                               | 0                                                                                 |   |   |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |   |   |
| Upstream Filter(I)                                                   | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              |   |   |
| Uniform Delay (d), s/veh                                             | 20.0                                                                              | 6.4                                                                               | 0.0                                                                               | 17.9                                                                              | 32.3                                                                              | 0.0                                                                               |   |   |
| Incr Delay (d2), s/veh                                               | 1.5                                                                               | 0.1                                                                               | 0.0                                                                               | 15.3                                                                              | 137.4                                                                             | 0.0                                                                               |   |   |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |   |   |
| %ile BackOfQ(50%),veh/ln                                             | 1.2                                                                               | 2.5                                                                               | 0.0                                                                               | 26.3                                                                              | 26.1                                                                              | 0.0                                                                               |   |   |
| LnGrp Delay(d),s/veh                                                 | 21.5                                                                              | 6.5                                                                               | 0.0                                                                               | 33.2                                                                              | 169.6                                                                             | 0.0                                                                               |   |   |
| LnGrp LOS                                                            | C                                                                                 | A                                                                                 |                                                                                   | C                                                                                 | F                                                                                 |                                                                                   |   |   |
| Approach Vol, veh/h                                                  |                                                                                   | 337                                                                               | 984                                                                               |                                                                                   | 533                                                                               |                                                                                   |   |   |
| Approach Delay, s/veh                                                |                                                                                   | 10.0                                                                              | 33.2                                                                              |                                                                                   | 169.6                                                                             |                                                                                   |   |   |
| Approach LOS                                                         |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   | F                                                                                 |                                                                                   |   |   |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7 | 8 |
| Assigned Phs                                                         |                                                                                   | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |   |   |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   | 60.5                                                                              |                                                                                   | 27.0                                                                              | 7.4                                                                               | 53.1                                                                              |   |   |
| Change Period (Y+Rc), s                                              |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |   |   |
| Max Green Setting (Gmax), s                                          |                                                                                   | 59.0                                                                              |                                                                                   | 23.0                                                                              | 4.0                                                                               | 51.0                                                                              |   |   |
| Max Q Clear Time (g_c+l1), s                                         |                                                                                   | 7.0                                                                               |                                                                                   | 25.0                                                                              | 3.6                                                                               | 45.1                                                                              |   |   |
| Green Ext Time (p_c), s                                              |                                                                                   | 13.6                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               | 4.0                                                                               |   |   |
| <b>Intersection Summary</b>                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |   |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 68.2                                                                              |                                                                                   |                                                                                   |                                                                                   |   |   |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |   |   |
| <b>Notes</b>                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |   |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |   |   |

# HCM 2010 Signalized Intersection Summary

## 2: Mtn Indus Blvd & US 78 EB On Ramp/US 78 EB Off Ramp

6/22/2016

|                                                                      |  |       |     |       |       |       |      |      |      |      |      |      |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-------|------|------|------|------|------|------|
| Movement                                                             | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR   | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations                                                  |                                                                                    |       |     |       | ↔     | ↗     | ↖    | ↕    |      |      | ↕↗↖  |      |
| Volume (veh/h)                                                       | 0                                                                                  | 0     | 0   | 65    | 0     | 200   | 310  | 1518 | 0    | 0    | 1817 | 927  |
| Number                                                               |                                                                                    |       |     | 3     | 8     | 18    | 5    | 2    | 12   | 1    | 6    | 16   |
| Initial Q (Qb), veh                                                  |                                                                                    |       |     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    |
| Ped-Bike Adj(A_pbT)                                                  |                                                                                    |       |     | 1.00  |       | 1.00  | 1.00 |      | 1.00 | 1.00 |      | 1.00 |
| Parking Bus, Adj                                                     |                                                                                    |       |     | 1.00  | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln                                               |                                                                                    |       |     | 1976  | 1863  | 1863  | 1792 | 1792 | 0    | 0    | 1776 | 1900 |
| Adj Flow Rate, veh/h                                                 |                                                                                    |       |     | 73    | 113   | 148   | 347  | 1700 | 0    | 0    | 2034 | 0    |
| Adj No. of Lanes                                                     |                                                                                    |       |     | 0     | 1     | 1     | 1    | 2    | 0    | 0    | 3    | 0    |
| Peak Hour Factor                                                     |                                                                                    |       |     | 0.92  | 0.92  | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, %                                                 |                                                                                    |       |     | 2     | 2     | 2     | 6    | 6    | 0    | 0    | 7    | 7    |
| Cap, veh/h                                                           |                                                                                    |       |     | 76    | 118   | 169   | 370  | 2861 | 0    | 0    | 3279 | 0    |
| Arrive On Green                                                      |                                                                                    |       |     | 0.11  | 0.11  | 0.11  | 0.14 | 0.84 | 0.00 | 0.00 | 0.68 | 0.00 |
| Sat Flow, veh/h                                                      |                                                                                    |       |     | 717   | 1110  | 1583  | 1707 | 3495 | 0    | 0    | 5167 | 0    |
| Grp Volume(v), veh/h                                                 |                                                                                    |       |     | 186   | 0     | 148   | 347  | 1700 | 0    | 0    | 2034 | 0    |
| Grp Sat Flow(s),veh/h/ln                                             |                                                                                    |       |     | 1827  | 0     | 1583  | 1707 | 1703 | 0    | 0    | 1616 | 0    |
| Q Serve(g_s), s                                                      |                                                                                    |       |     | 15.2  | 0.0   | 13.8  | 18.0 | 23.9 | 0.0  | 0.0  | 35.1 | 0.0  |
| Cycle Q Clear(g_c), s                                                |                                                                                    |       |     | 15.2  | 0.0   | 13.8  | 18.0 | 23.9 | 0.0  | 0.0  | 35.1 | 0.0  |
| Prop In Lane                                                         |                                                                                    |       |     | 0.39  |       | 1.00  | 1.00 |      | 0.00 | 0.00 |      | 0.00 |
| Lane Grp Cap(c), veh/h                                               |                                                                                    |       |     | 195   | 0     | 169   | 370  | 2861 | 0    | 0    | 3279 | 0    |
| V/C Ratio(X)                                                         |                                                                                    |       |     | 0.95  | 0.00  | 0.88  | 0.94 | 0.59 | 0.00 | 0.00 | 0.62 | 0.00 |
| Avail Cap(c_a), veh/h                                                |                                                                                    |       |     | 195   | 0     | 169   | 432  | 2861 | 0    | 0    | 3279 | 0    |
| HCM Platoon Ratio                                                    |                                                                                    |       |     | 1.00  | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I)                                                   |                                                                                    |       |     | 1.00  | 0.00  | 1.00  | 0.38 | 0.38 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh                                             |                                                                                    |       |     | 66.6  | 0.0   | 66.0  | 41.4 | 3.8  | 0.0  | 0.0  | 13.5 | 0.0  |
| Incr Delay (d2), s/veh                                               |                                                                                    |       |     | 51.3  | 0.0   | 36.7  | 13.0 | 0.3  | 0.0  | 0.0  | 0.9  | 0.0  |
| Initial Q Delay(d3),s/veh                                            |                                                                                    |       |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| %ile BackOfQ(50%),veh/ln                                             |                                                                                    |       |     | 10.5  | 0.0   | 7.8   | 15.5 | 11.0 | 0.0  | 0.0  | 15.9 | 0.0  |
| LnGrp Delay(d),s/veh                                                 |                                                                                    |       |     | 118.0 | 0.0   | 102.7 | 54.4 | 4.2  | 0.0  | 0.0  | 14.4 | 0.0  |
| LnGrp LOS                                                            |                                                                                    |       |     | F     |       | F     | D    | A    |      |      | B    |      |
| Approach Vol, veh/h                                                  |                                                                                    |       |     |       | 334   |       |      | 2047 |      |      | 2034 |      |
| Approach Delay, s/veh                                                |                                                                                    |       |     |       | 111.2 |       |      | 12.7 |      |      | 14.4 |      |
| Approach LOS                                                         |                                                                                    |       |     |       | F     |       |      | B    |      |      | B    |      |
| Timer                                                                | 1                                                                                  | 2     | 3   | 4     | 5     | 6     | 7    | 8    |      |      |      |      |
| Assigned Phs                                                         |                                                                                    | 2     |     |       | 5     | 6     |      | 8    |      |      |      |      |
| Phs Duration (G+Y+Rc), s                                             |                                                                                    | 130.0 |     |       | 24.5  | 105.5 |      | 20.0 |      |      |      |      |
| Change Period (Y+Rc), s                                              |                                                                                    | 4.0   |     |       | 4.0   | 4.0   |      | 4.0  |      |      |      |      |
| Max Green Setting (Gmax), s                                          |                                                                                    | 126.0 |     |       | 26.0  | 96.0  |      | 16.0 |      |      |      |      |
| Max Q Clear Time (g_c+I1), s                                         |                                                                                    | 25.9  |     |       | 20.0  | 37.1  |      | 17.2 |      |      |      |      |
| Green Ext Time (p_c), s                                              |                                                                                    | 81.8  |     |       | 0.6   | 52.1  |      | 0.0  |      |      |      |      |
| <b>Intersection Summary</b>                                          |                                                                                    |       |     |       |       |       |      |      |      |      |      |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                    |       |     | 20.9  |       |       |      |      |      |      |      |      |
| HCM 2010 LOS                                                         |                                                                                    |       |     | C     |       |       |      |      |      |      |      |      |
| <b>Notes</b>                                                         |                                                                                    |       |     |       |       |       |      |      |      |      |      |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                    |       |     |       |       |       |      |      |      |      |      |      |

# HCM 2010 Signalized Intersection Summary

## 3: Mtn Industrial Blvd & SR 236/Hugh Howell Rd

6/22/2016

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (veh/h)               | 100                                                                               | 874                                                                               | 246                                                                               | 306                                                                               | 384                                                                               | 85                                                                                | 213                                                                                 | 884                                                                                 | 297                                                                                 | 273                                                                                 | 1179                                                                                | 79                                                                                  |
| Number                       | 7                                                                                 | 4                                                                                 | 14                                                                                | 3                                                                                 | 8                                                                                 | 18                                                                                | 5                                                                                   | 2                                                                                   | 12                                                                                  | 1                                                                                   | 6                                                                                   | 16                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Adj Sat Flow, veh/h/ln       | 1863                                                                              | 1863                                                                              | 1863                                                                              | 1845                                                                              | 1845                                                                              | 1845                                                                              | 1792                                                                                | 1792                                                                                | 1792                                                                                | 1810                                                                                | 1810                                                                                | 1810                                                                                |
| Adj Flow Rate, veh/h         | 109                                                                               | 950                                                                               | 0                                                                                 | 333                                                                               | 417                                                                               | 0                                                                                 | 232                                                                                 | 961                                                                                 | 0                                                                                   | 297                                                                                 | 1282                                                                                | 0                                                                                   |
| Adj No. of Lanes             | 1                                                                                 | 2                                                                                 | 1                                                                                 | 2                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 | 3                                                                                 | 6                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Cap, veh/h                   | 393                                                                               | 944                                                                               | 422                                                                               | 341                                                                               | 1068                                                                              | 478                                                                               | 216                                                                                 | 1135                                                                                | 508                                                                                 | 331                                                                                 | 1299                                                                                | 581                                                                                 |
| Arrive On Green              | 0.06                                                                              | 0.27                                                                              | 0.00                                                                              | 0.10                                                                              | 0.30                                                                              | 0.00                                                                              | 0.08                                                                                | 0.33                                                                                | 0.00                                                                                | 0.12                                                                                | 0.38                                                                                | 0.00                                                                                |
| Sat Flow, veh/h              | 1774                                                                              | 3539                                                                              | 1583                                                                              | 3408                                                                              | 3505                                                                              | 1568                                                                              | 1707                                                                                | 3406                                                                                | 1524                                                                                | 1723                                                                                | 3438                                                                                | 1538                                                                                |
| Grp Volume(v), veh/h         | 109                                                                               | 950                                                                               | 0                                                                                 | 333                                                                               | 417                                                                               | 0                                                                                 | 232                                                                                 | 961                                                                                 | 0                                                                                   | 297                                                                                 | 1282                                                                                | 0                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1774                                                                              | 1770                                                                              | 1583                                                                              | 1704                                                                              | 1752                                                                              | 1568                                                                              | 1707                                                                                | 1703                                                                                | 1524                                                                                | 1723                                                                                | 1719                                                                                | 1538                                                                                |
| Q Serve(g_s), s              | 4.0                                                                               | 24.0                                                                              | 0.0                                                                               | 8.8                                                                               | 8.4                                                                               | 0.0                                                                               | 7.0                                                                                 | 23.6                                                                                | 0.0                                                                                 | 9.8                                                                                 | 33.3                                                                                | 0.0                                                                                 |
| Cycle Q Clear(g_c), s        | 4.0                                                                               | 24.0                                                                              | 0.0                                                                               | 8.8                                                                               | 8.4                                                                               | 0.0                                                                               | 7.0                                                                                 | 23.6                                                                                | 0.0                                                                                 | 9.8                                                                                 | 33.3                                                                                | 0.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 393                                                                               | 944                                                                               | 422                                                                               | 341                                                                               | 1068                                                                              | 478                                                                               | 216                                                                                 | 1135                                                                                | 508                                                                                 | 331                                                                                 | 1299                                                                                | 581                                                                                 |
| V/C Ratio(X)                 | 0.28                                                                              | 1.01                                                                              | 0.00                                                                              | 0.98                                                                              | 0.39                                                                              | 0.00                                                                              | 1.07                                                                                | 0.85                                                                                | 0.00                                                                                | 0.90                                                                                | 0.99                                                                                | 0.00                                                                                |
| Avail Cap(c_a), veh/h        | 402                                                                               | 944                                                                               | 422                                                                               | 341                                                                               | 1068                                                                              | 478                                                                               | 216                                                                                 | 1135                                                                                | 508                                                                                 | 331                                                                                 | 1299                                                                                | 581                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                |
| Uniform Delay (d), s/veh     | 21.8                                                                              | 33.0                                                                              | 0.0                                                                               | 40.4                                                                              | 24.7                                                                              | 0.0                                                                               | 24.4                                                                                | 27.9                                                                                | 0.0                                                                                 | 20.1                                                                                | 27.8                                                                                | 0.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.4                                                                               | 30.9                                                                              | 0.0                                                                               | 42.4                                                                              | 0.2                                                                               | 0.0                                                                               | 82.3                                                                                | 7.9                                                                                 | 0.0                                                                                 | 25.7                                                                                | 22.1                                                                                | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 1.9                                                                               | 15.7                                                                              | 0.0                                                                               | 6.1                                                                               | 4.1                                                                               | 0.0                                                                               | 4.9                                                                                 | 12.3                                                                                | 0.0                                                                                 | 6.9                                                                                 | 19.6                                                                                | 0.0                                                                                 |
| LnGrp Delay(d),s/veh         | 22.2                                                                              | 63.9                                                                              | 0.0                                                                               | 82.8                                                                              | 24.9                                                                              | 0.0                                                                               | 106.7                                                                               | 35.7                                                                                | 0.0                                                                                 | 45.8                                                                                | 49.8                                                                                | 0.0                                                                                 |
| LnGrp LOS                    | C                                                                                 | F                                                                                 |                                                                                   | F                                                                                 | C                                                                                 |                                                                                   | F                                                                                   | D                                                                                   |                                                                                     | D                                                                                   | D                                                                                   |                                                                                     |
| Approach Vol, veh/h          | 1059                                                                              |                                                                                   |                                                                                   |                                                                                   | 750                                                                               |                                                                                   |                                                                                     | 1193                                                                                |                                                                                     |                                                                                     | 1579                                                                                |                                                                                     |
| Approach Delay, s/veh        | 59.6                                                                              |                                                                                   |                                                                                   |                                                                                   | 50.6                                                                              |                                                                                   |                                                                                     | 49.5                                                                                |                                                                                     |                                                                                     | 49.1                                                                                |                                                                                     |
| Approach LOS                 | E                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Timer                        | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Assigned Phs                 | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 15.0                                                                              | 34.0                                                                              | 13.0                                                                              | 28.0                                                                              | 11.0                                                                              | 38.0                                                                              | 9.6                                                                                 | 31.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 11.0                                                                              | 30.0                                                                              | 9.0                                                                               | 24.0                                                                              | 7.0                                                                               | 34.0                                                                              | 6.0                                                                                 | 27.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+l1), s | 11.8                                                                              | 25.6                                                                              | 10.8                                                                              | 26.0                                                                              | 9.0                                                                               | 35.3                                                                              | 6.0                                                                                 | 10.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 3.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 Ctrl Delay          | 51.9                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2010 LOS                 | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM 2010 Signalized Intersection Summary

## 8: SR 236/Hugh Howell Rd & Rosser Rd

6/22/2016

|                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|
|                                                                      |  |  |  |  |  |  |      |      |
| Movement                                                             | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR                                                                               | SWL                                                                               | SWR                                                                               |      |      |
| Lane Configurations                                                  |  |  |  |                                                                                   |  |  |      |      |
| Volume (veh/h)                                                       | 389                                                                               | 920                                                                               | 306                                                                               | 5                                                                                 | 4                                                                                 | 155                                                                               |      |      |
| Number                                                               | 7                                                                                 | 4                                                                                 | 8                                                                                 | 18                                                                                | 1                                                                                 | 16                                                                                |      |      |
| Initial Q (Qb), veh                                                  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      |      |
| Ped-Bike Adj(A_pbT)                                                  | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |      |      |
| Parking Bus, Adj                                                     | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |      |      |
| Adj Sat Flow, veh/h/ln                                               | 1881                                                                              | 1881                                                                              | 1845                                                                              | 1900                                                                              | 1881                                                                              | 1900                                                                              |      |      |
| Adj Flow Rate, veh/h                                                 | 423                                                                               | 1000                                                                              | 360                                                                               | 6                                                                                 | 4                                                                                 | 170                                                                               |      |      |
| Adj No. of Lanes                                                     | 1                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      |      |
| Peak Hour Factor                                                     | 0.92                                                                              | 0.92                                                                              | 0.85                                                                              | 0.85                                                                              | 0.91                                                                              | 0.91                                                                              |      |      |
| Percent Heavy Veh, %                                                 | 1                                                                                 | 1                                                                                 | 3                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 |      |      |
| Cap, veh/h                                                           | 723                                                                               | 1229                                                                              | 682                                                                               | 11                                                                                | 6                                                                                 | 247                                                                               |      |      |
| Arrive On Green                                                      | 0.18                                                                              | 0.65                                                                              | 0.38                                                                              | 0.38                                                                              | 0.16                                                                              | 0.16                                                                              |      |      |
| Sat Flow, veh/h                                                      | 1792                                                                              | 1881                                                                              | 1809                                                                              | 30                                                                                | 37                                                                                | 1558                                                                              |      |      |
| Grp Volume(v), veh/h                                                 | 423                                                                               | 1000                                                                              | 0                                                                                 | 366                                                                               | 175                                                                               | 0                                                                                 |      |      |
| Grp Sat Flow(s),veh/h/ln                                             | 1792                                                                              | 1881                                                                              | 0                                                                                 | 1839                                                                              | 1604                                                                              | 0                                                                                 |      |      |
| Q Serve(g_s), s                                                      | 5.2                                                                               | 16.7                                                                              | 0.0                                                                               | 6.6                                                                               | 4.4                                                                               | 0.0                                                                               |      |      |
| Cycle Q Clear(g_c), s                                                | 5.2                                                                               | 16.7                                                                              | 0.0                                                                               | 6.6                                                                               | 4.4                                                                               | 0.0                                                                               |      |      |
| Prop In Lane                                                         | 1.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                              | 0.02                                                                              | 0.97                                                                              |      |      |
| Lane Grp Cap(c), veh/h                                               | 723                                                                               | 1229                                                                              | 0                                                                                 | 693                                                                               | 254                                                                               | 0                                                                                 |      |      |
| V/C Ratio(X)                                                         | 0.59                                                                              | 0.81                                                                              | 0.00                                                                              | 0.53                                                                              | 0.69                                                                              | 0.00                                                                              |      |      |
| Avail Cap(c_a), veh/h                                                | 903                                                                               | 1595                                                                              | 0                                                                                 | 866                                                                               | 605                                                                               | 0                                                                                 |      |      |
| HCM Platoon Ratio                                                    | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |      |      |
| Upstream Filter(I)                                                   | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              |      |      |
| Uniform Delay (d), s/veh                                             | 5.8                                                                               | 5.5                                                                               | 0.0                                                                               | 10.3                                                                              | 16.9                                                                              | 0.0                                                                               |      |      |
| Incr Delay (d2), s/veh                                               | 0.8                                                                               | 2.6                                                                               | 0.0                                                                               | 0.6                                                                               | 3.3                                                                               | 0.0                                                                               |      |      |
| Initial Q Delay(d3),s/veh                                            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      |      |
| %ile BackOfQ(50%),veh/ln                                             | 2.5                                                                               | 9.2                                                                               | 0.0                                                                               | 3.4                                                                               | 2.2                                                                               | 0.0                                                                               |      |      |
| LnGrp Delay(d),s/veh                                                 | 6.5                                                                               | 8.0                                                                               | 0.0                                                                               | 10.9                                                                              | 20.2                                                                              | 0.0                                                                               |      |      |
| LnGrp LOS                                                            | A                                                                                 | A                                                                                 |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   |      |      |
| Approach Vol, veh/h                                                  |                                                                                   | 1423                                                                              | 366                                                                               |                                                                                   | 175                                                                               |                                                                                   |      |      |
| Approach Delay, s/veh                                                |                                                                                   | 7.6                                                                               | 10.9                                                                              |                                                                                   | 20.2                                                                              |                                                                                   |      |      |
| Approach LOS                                                         |                                                                                   | A                                                                                 | B                                                                                 |                                                                                   | C                                                                                 |                                                                                   |      |      |
| Timer                                                                | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7    | 8    |
| Assigned Phs                                                         |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 6                                                                                 | 7    | 8    |
| Phs Duration (G+Y+Rc), s                                             |                                                                                   |                                                                                   |                                                                                   | 31.7                                                                              |                                                                                   | 10.7                                                                              | 11.7 | 20.0 |
| Change Period (Y+Rc), s                                              |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0  | 4.0  |
| Max Green Setting (Gmax), s                                          |                                                                                   |                                                                                   |                                                                                   | 36.0                                                                              |                                                                                   | 16.0                                                                              | 12.0 | 20.0 |
| Max Q Clear Time (g_c+l1), s                                         |                                                                                   |                                                                                   |                                                                                   | 18.7                                                                              |                                                                                   | 6.4                                                                               | 7.2  | 8.6  |
| Green Ext Time (p_c), s                                              |                                                                                   |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   | 0.3                                                                               | 0.6  | 6.9  |
| Intersection Summary                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |
| HCM 2010 Ctrl Delay                                                  |                                                                                   |                                                                                   | 9.3                                                                               |                                                                                   |                                                                                   |                                                                                   |      |      |
| HCM 2010 LOS                                                         |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |      |      |
| Notes                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |
| User approved volume balancing among the lanes for turning movement. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |