Transportation Analysis

Destinations Multi-Use Development
Development of Regional Impact #2574
Gwinnett County, Georgia

June 30, 2016

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

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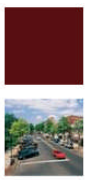
Destinations Multi-Use Development
Development of Regional Impact #2574
Gwinnett County, Georgia

study prepared for:

Ivy Creek Partners, LLC
2604 Powers Avenue
Jacksonville, FL 32207

June 30, 2016



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Summary

This Transportation Analysis was prepared for the Destinations Mall of Georgia Development of Regional Impact (DRI) #2574, in compliance with the requirements of the Georgia Regional Transportation Authority.

The site is located east of the Mall of Georgia, along the north side of Mall of Georgia Boulevard and the southwest side of Woodward Crossing Boulevard. The project will consist of 111,820 ft² of retail and restaurants, a 35,000 ft² grocery store, a 50,000 ft² family entertainment center, an outparcel with 20,000 ft² of additional retail shops and restaurants, a 250 room hotel, 352 residential apartments, 40 condominiums, and 91,200 ft² of office. Access to the site will be provided at two full-movement intersections and three right-in/right-out driveways. A pedestrian bridge will be built connecting the project to the Mall of Georgia property.

The Destinations project will generate 746 new a.m. peak hour trips, 1,211 new p.m. peak hour trips, 1,551 new Saturday peak hour trips, and 14,726 new 24-hour trips.

The mixed-use character of the project will reduce daily trip generation by 16%.

Five programmed transportation infrastructure projects were identified in the vicinity of the Destinations DRI. However, all are scheduled to be implemented after full project build-out, so, none were included in the operational analysis.

The existing analysis identified the following mitigation:

Intersection 1 – Buford Drive at Mall of Georgia Boulevard: Add a second eastbound exclusive right turn lane and accompanying right turn overlap phase on Mall of Georgia Boulevard.

Intersection 6 – Mall of Georgia at Appaloosa Lane: Perform a signal warrant study according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices*.

Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard: Add a northbound right turn overlap phase, to run concurrently with the westbound protected left turn phase.

The existing analysis identified other improvements at several study intersections. These are not formally considered mitigation to achieve operational standards, but are recommended to correct other deficiencies such as faded striping or missing signage.

The no-build analysis identified the following mitigation:

Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard: Add a second northbound exclusive right turn lane, in addition to the protected right turn overlap phase previously recommended for this movement.

Intersection 9 – Buford Drive at Woodward Crossing Boulevard: Add a northbound exclusive right turn lane on Buford Drive at Woodward Crossing Boulevard. Add a westbound right turn channelizing island on Woodward Crossing Boulevard and accompanying protected right turn lane overlap phasing.

Intersection 12 – Buford Drive at Gravel Springs Road: Add an eastbound right turn lane on Financial Center Way and a southbound right turn lane on Buford Drive. Signal timing should be optimized for the recommended changes in laneage.

The future analysis identified the following mitigation:

Intersection 6 – Mall of Georgia Boulevard at Appaloosa Lane / Destinations Access: As identified in the existing analysis, a signal warrant analysis should be performed at this intersection based on the MUTCD to determine if this intersection meets the criteria for signalization. Should the intersection remain unsignalized, the southbound approach exiting Destinations at Mall of Georgia Boulevard should be striped with a shared left/through lane and an exclusive right turn lane. This approach should be controlled by a stop sign and accompanying stop bar. The northbound approach on Appaloosa Lane should add a through arrow to the existing left turn lane, to accommodate trips from Appaloosa Lane into Destinations. Should signalization be pursued and justified, the signal warrant study will specify the appropriate lane configuration and signal phasing.

Intersection 13 – Woodward Crossing Boulevard at Destinations Access: A signal warrant study should be performed according to MUTCD standards to determine if a signal is justified at this location. Should Intersection 13 remain unsignalized, the northbound approach exiting Destinations at Woodward Crossing Boulevard should be striped with an exclusive left turn lane and an exclusive right turn lane. This approach should be controlled by a stop sign and accompanying stop bar. Should signalization be pursued and justified, the signal warrant study will specify the appropriate lane configuration and signal phasing, which may take into consideration the potential for development on the fourth approach, opposing the Destinations access.

The site access analysis identified the following improvements:

A deceleration lane should be provided at all five site accesses. Each should provide 200 feet of full-width (12 feet) storage length and an additional 50 foot taper. The distances between the driveways may necessitate slight reductions in the storage lengths at some of these locations.

A left turn lane is already provided for eastbound left turns entering Destinations from Mall of Georgia Boulevard at Intersection 6 and for westbound left turners entering Destinations from Woodward Crossing Boulevard at Intersection 13. The left turn lane on Mall of Georgia Boulevard requires 375 feet of full width storage, plus taper. Should the intersection be signalized, this storage requirement may change. The existing lane provides approximately 200 feet of storage and should be lengthened. The current U-Turn arrows should be replaced with standard left turn arrows.

At Intersection 13 the existing left turn lane provides approximately 200 feet of full-width storage plus a taper and this is expected to be sufficient to accommodate site volume projections.

Intersection sight distance of 530 feet to the left and 600 feet to the right should be provided at the two full-movement site access, and 530 feet to the left should be provided at the three RIRO accesses. Removal of some vegetation may be required to achieve this distance at some locations, once the accesses are constructed.

The project site engineer is advised to ensure that the design of the site driveways and all site internal streets comply with all applicable design standards, including the Gwinnett County Unified Development Ordinance.

Internal circulation within the site, and connectivity with adjacent properties, will be facilitated by a semi-grid of internal streets. The Mall of Georgia Boulevard full-movement access aligns with existing Appaloosa Lane and the Woodward Crossing Boulevard access aligns with an existing stub that may become an access to property on the north side of the road, when it is ultimately developed. An internal roadway runs north/south through the site, connecting the Mall of Georgia access with the Woodward Crossing access and an east-west roadway runs through the site, intersecting with the north/south roadway and creating a minor grid of streets within the limited area of the site. The parking garages are each provided with multiple accesses to different internal roadways, providing connectivity and options for motorists. Internal circulation is somewhat limited by the small area of the site, but the semi-grid roadway design allows for flexibility and good circulation between the various portions of the development. The site plan does not include vehicular connectivity to the Mall of Georgia property, which is the adjacent property to the west.

Sidewalks will be provided along both sides of all internal streets. These will connect to the existing sidewalks along the frontages on Mall of Georgia Boulevard and Woodward Crossing Boulevard. In order to facilitate pedestrian access to the Mall of Georgia, a pedestrian bridge is proposed from the center of the Destinations project, over Ivy Creek, to close proximity of the eastern end of the Mall building. Should the main site accesses be signalized, pedestrian crosswalks and signals would be recommended at these locations.

No bicycle lanes exist in the study area and none are proposed within the Destinations site. However, due to the mix of land uses in the area, and in order to encourage and facilitate this mode of travel, bicycle racks should be installed at the entrances to the retail shopping, family entertainment center, and near the offices and hotel.

Chapter 10 addresses the compliance of Destinations DRI #2574 with the five criteria presented in Section 3-101 – General Criteria Applicable to All Proposed DRIs, and the three criteria presented in Section 3-103 – Criteria for GRTA DRI Non-Expedited Review, both found in *Procedures and Principles for GRTA Development of Regional Impact Review*.

Contents

SUMMARY

1. PROJECT DESCRIPTION 1

1.1 Project Phasing, Pods, and Land Uses 2
1.2 Site Plan 3
1.3 Site Vehicular Access 3
1.4 On-Site Pedestrian and Bicycle Facilities 3
1.5 Transit Access 3
1.6 Parking 5

2. STUDY NETWORK 6

2.1 Peak Time Periods And Analysis Conditions 6
2.2 Level of Service Standard 6

3. EXISTING TRANSPORTATION FACILITIES 7

3.1 Mall of Georgia Boulevard 7
3.2 Woodward Crossing Boulevard 8
3.3 Buford Drive (SR 20) 8
3.4 Gravel Springs Road (SR 324) 9
3.5 Transit Service 10
3.6 Bicycle and Pedestrian Facilities 10

4. PROJECT TRAFFIC CHARACTERISTICS 11

4.1 Trip Generation 11
4.2 Trip Distribution and Assignment 13

5. EXISTING TRAFFIC ANALYSIS 17

5.1 Existing Lanes and Traffic Control 17
5.2 Existing Traffic Volumes 17
5.3 Existing Intersection Operations 21
5.4 Existing Facilities Needs Analysis 23
Intersection 1 – Buford Drive at Mall of Georgia Boulevard 23
Intersection 6 – Mall of Georgia at Appaloosa Lane 24
Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard 24
Intersection 9 – Buford Drive at Woodward Crossing Boulevard 25
5.5 Other Recommendations for Existing Conditions 25

6. NO-BUILD TRAFFIC ANALYSIS 27

6.1 No Build Lanes and Traffic Control 27
6.2 No-Build Traffic Volumes 27
6.3 No-Build Intersection Operations 31
6.4 No-Build Facilities Needs Analysis 33
Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard 33
Intersection 9 – Buford Drive at Woodward Crossing Boulevard 33
Intersection 12 – Buford Drive at Gravel Springs Road 34

7. FUTURE (BUILD) TRAFFIC ANALYSIS 35

7.1 Build Lanes and Traffic Control 35
7.2 Build Traffic Volumes 35
7.3 Build Intersection Operations 38
7.4 Build Facilities Needs Analysis 40
Intersection 6 – Mall of Georgia Boulevard at Appaloosa Lane / Destinations Access 40
Intersection 7 – Mall of Georgia Boulevard at Woodward Crossing Boulevard 40
Intersection 9 – Buford Drive at Woodward Crossing Boulevard 41
Intersection 12 – Buford Drive at Gravel Springs Road 41
Intersection 13 – Woodward Crossing Boulevard at Destinations Access 41
Other Network Intersections 42
7.5 Destinations Site Access Analysis 42
7.6 Gwinnett County Auxiliary Lane and Sight Distance Assessment at Site Accesses 44
7.6.1 Right Turn Lanes 44
7.6.2 Left Turn Lanes 44
7.6.3 Intersection Sight Distance 45

8. SUMMARY OF RECOMMENDED MITIGATION 46

9. SITE INTERNAL CIRCULATION AND CONNECTIVITY 48

10. PROGRAMMED INFRASTRUCTURE PROJECTS 49

AR-ML-410 49
GW-020D 49
GW-308C 49
GW-388 49

11. COMPLIANCE WITH GRTA CRITERIA 50

11.1 General Criteria Applicable to All Proposed DRIs 50
11.2 Criteria for GRTA DRI Non-Expedited Review 51

APPENDIX

Tables

Table 1 – Destinations Proposed Land Uses and Sizes 3
Table 2 – Destinations On-Site Parking 5
Table 3 – Intersections Included in the Study Network 6
Table 4 – Destinations Trip Generation 13
Table 5 – Existing Intersection Levels of Service 21
Table 6 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates 27
Table 7 – Future No-Build Intersection Operations 31
Table 8 – Future Build Intersection Operations 38
Table 9 – RIRO Site Access Intersection Operations* 43
Table 10 – Summary of Mitigation 49
Table 11 – Programmed Transportation Infrastructure Projects 49
Table A – Level of Service Criteria for Signalized Intersections ..... Appendix
Table B – Level of Service Criteria for Unsignalized Intersections ..... Appendix

Figures

Figure 1 – Area Map 1
Figure 2 – Site Vicinity Aerial Photograph 2
Figure 3 – Destinations Site Plan 4
Figure 4 – Destinations Trip Distribution Percentages and Weekday A.M. and P.M. Site-Generated Trips 15
Figure 5 – Destinations Trip Distribution Percentages and Saturday Site-Generated Trips 16
Figure 6 – Existing Lane Configuration and Traffic Control 18
Figure 7 – Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes 19
Figure 8 – Existing Saturday Peak Hour Traffic Volumes 20
Figure 9 – No-Build Weekday A.M and P.M. Peak Hour Traffic Volume Projections 29
Figure 10 – No-Build Saturday Peak Hour Traffic Volume Projections 30
Figure 11 – Future Build Weekday A.M. and P.M. Peak Hour Traffic Volume Projections 36
Figure 12 – Future Build Saturday Peak Hour Traffic Volume Projections 37
Figure 13 – Future Build Peak Hour Traffic Volume Projections at All Site Accesses 43
Figure 14 – Summary of Mitigation 43

Photographs

Photograph 1 – Mall of Georgia Boulevard Facing East at Nature Center Parkway 7
Photograph 2 – Woodward Crossing Boulevard Facing East Near Crossing View Road 8
Photograph 3 – SR 20 Facing North at Mall of Georgia Boulevard 9
Photograph 4 – SR 324 Facing West from Cedar Glade Lane 10

1. Project Description

This Transportation Analysis was performed for the proposed Development of Regional Impact (DRI) #2574 – Destinations Mall of Georgia. The site is located east of the Mall of Georgia, along the north side of Mall of Georgia Boulevard and the southwest side of Woodward Crossing Boulevard. The project will consist of 111,820 ft² of retail and restaurants, a 35,000 ft² grocery store, a 50,000 ft² family entertainment center, an outparcel with 20,000 ft² of additional retail shops and restaurants, a 250 room hotel, 352 residential apartments, 40 condominiums, and either 91,200 ft² of office or an additional 135 to 240 residential apartments. Vehicular access will be provided at two existing median breaks, one on Mall of Georgia Boulevard at Appaloosa Lane and one on Woodward Crossing Boulevard northwest of Mall of Georgia Boulevard. Three right-in / right-out accesses will also be provided. A pedestrian bridge will be constructed over Ivy Creek, connecting the project directly to the Mall of Georgia property. An area map is presented in Figure 1 and an aerial photograph of the immediate site vicinity is presented in Figure 2. The total square footage of the multi-use development exceeds 400,000 square feet, which is a DRI threshold for a multi-use development in a metropolitan region, as set forth in the Georgia Department of Community Affairs (DCA) website for DRIs, Table I – Developments of Regional Impact Tiers and Development Thresholds. Therefore, this study was performed to meet the Georgia Regional Transportation Authority (GRTA) Development of Regional Impact non-expedited review requirements, according to the GRTA *DRI Review Package Technical Guidelines*.

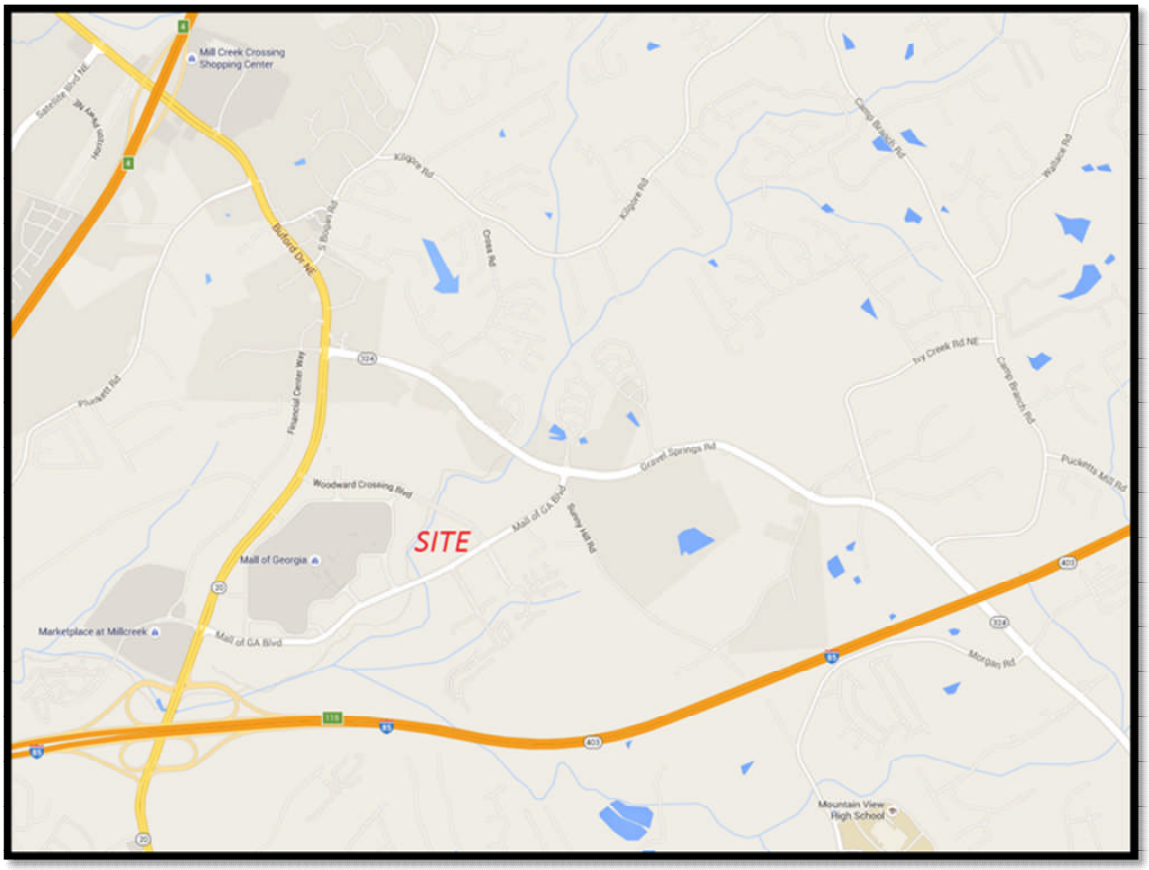

Figure 1 – Area Map

Figure 2 – Site Vicinity Aerial Photograph

1.1 Project Phasing, Pods, and Land Uses

The subject site is currently undeveloped. The proposed Destinations DRI will redevelop the site with a mix of retail and restaurants, a grocery store, a family entertainment center, an outparcel with additional retail shops and restaurants, a hotel, residential apartments, residential condominiums, and either additional office or residential apartments, depending on market conditions as the project develops. The project will be built in one continuous phase, with build-out expected in 2019. Table 1 presents the programmed land uses and sizes. The Pods correspond to the site plan presented in Figure 3.

Table 1 – Destinations Proposed Land Uses and Sizes

Pod	Land Use	Size
A, B, C, D, F, H	Retail and Restaurants	111,820 ft²
A	Grocery Store	35,000 ft²
B	Family Entertainment Center	50,000 ft²
G	Outparcel Retail and Restaurants	20,000 ft²
E	Hotel	250 rooms
A	Residential Apartments	352 units
E	Residential Condominiums	40 units
H	Option: Office* or Apartments	91,200 ft² or 135-240 units

*office option used in analysis

1.2 Site Plan

This study is based on the site plan called Mall of Georgia Master Plan, prepared by Cooper Carry, Inc., dated March 21, 2016, as shown in Figure 3.

1.3 Site Vehicular Access

Vehicular access will be provided at two existing median breaks, one on Mall of Georgia Boulevard at Appaloosa Lane and one on Woodward Crossing Boulevard northwest of Mall of Georgia Boulevard. These will be full movement accesses. Three minor right-in / right-out driveways will also be provided, one on Woodward Crossing Boulevard and two on Mall of Georgia Boulevard.

1.4 On-Site Pedestrian and Bicycle Facilities

Sidewalks will be provided on both sides of all streets within the site. In addition, the proposed development site plan includes a pedestrian bridge across Ivy Creek from the project to the Mall of Georgia. Site sidewalks will connect to the existing sidewalks located on both sides of Mall of Georgia Boulevard and Woodward Crossing Boulevard. There are no dedicated or shared striped bicycle lanes adjacent to the subject site and no bicycle lanes are proposed within the destination site. It is recommended that bicycle racks be located strategically throughout the Destinations site.

1.5 Transit Access

There is no public transit available immediately adjacent to, or through, the Destinations site. Transit service is available in the area, as discussed in section 3.5 of this report.

site plan by Cooper-Carry

Figure 3 – Destinations Site Plan

1.6 Parking

Parking will be provided on-site by a combination of parking deck and on-street parking. All parking is shown on the site plan submitted with this report. The on-site parking is summarized in Table 2.

Table 2 – Destinations On-Site Parking

Land Use	Spaces Required	Spaces Provided
Apartments	2 per unit = 696	696
Restaurant / Retail	5 per 1,000 = 424	460 (65 on-street)
Office	3.3 per 1,000 = 301	301
Hotel	1.25 per key = 313	313
Condominium	2 per unit = 80	80
Grocery Store	5 per 1,000 = 175	175
Family Entertainment Center	5 per 1,000 = 250	250
Total	2,239 spaces	2,275
Total Off-Street Parking Provided		2,210
Total On-Street Parking Provided		65

from site plan by Cooper-Carry

2. Study Network

The study network for this project was agreed to with GRTA and specified in GRTA's Letter of Understanding (LOU) dated June 1, 2016. The network is presented in Table 3.

Table 3 – Intersections Included in the Study Network

#	Description
1.	Buford Drive (SR 20) at Mall of Georgia Boulevard
2.	Mall of Georgia Boulevard at Coastal Avenue
3.	Mall of Georgia Boulevard at Nature Center Parkway
4.	Mall of Georgia Boulevard at Village Way Lane
5.	Mall of Georgia Boulevard at Trail Path Lane
6.	Mall of Georgia Boulevard at Appaloosa Lane and future site access
7.	Mall of Georgia Boulevard at Woodward Crossing Boulevard / Century Mill Creek Apartments
8.	Gravel Springs Road (SR 324) at Mall of Georgia Boulevard / Cedar Glade Lane
9.	Buford Drive (SR 20) at Woodward Crossing Boulevard
10.	Woodward Crossing Boulevard at Piedmont Court Drive
11.	Woodward Crossing Boulevard at Crossing View Road
12.	Buford Drive (SR 20) at Gravel Springs Road (SR 324) / Financial Center Way
13.	Woodward Crossing Boulevard and future site access
14.	All site driveways

2.1 Peak Time Periods And Analysis Conditions

All analyses are performed for the weekday a.m. peak hour (counted 7:00-9:00 a.m.), the weekday p.m. peak hour (counted 4:30-6:30 p.m.), and the Saturday afternoon peak hour (counted 3:00-6:00 p.m.). The existing 2015, 2019 no-build, and 2019 build conditions are evaluated.

2.2 Level of Service Standard

The level of service standard is that level of service considered to be the minimum that provides acceptable operating conditions. A level of service (LOS) standard of D is used for suburban and urban areas, and for this study a LOS D standard was applied to all facilities. In the facilities needs analyses, mitigation is developed with LOS D as the minimum goal. Appendix A includes a description of the methodology used for the intersection analysis.

3. Existing Transportation Facilities

This section provides a description of the existing transportation infrastructure that will serve the proposed Destinations DRI. An inventory was performed of the lanes and method of control at the existing traffic facilities in the vicinity of the site. The availability of transit, bicycle, and pedestrian facilities adjacent to the site was also reviewed. Figure 6, in the Existing Traffic Analysis section of this report, depicts the existing lanes and control for the intersections and roadways in the study network. The following is a brief description of each of these facilities.

3.1 Mall of Georgia Boulevard

Mall of Georgia Boulevard is a southwest-northeast boulevard that begins just west of Buford Drive and connects to Gravel Springs Road. The road has two through lanes in each direction and is divided by a grassed median. Exclusive left turn lanes are provided at all median breaks and exclusive right turn lanes are provided at most busier right turn movements. The road primarily serves retail shopping land uses including a large regional mall and multiple strip shopping centers. Closer to Gravel Springs Road, Mall of Georgia Boulevard provides access to government services (fire station, tag office), residential development, and undeveloped land. The terrain along Mall of Georgia Boulevard is gently rolling and the posted speed limit is 45 mph. Photograph 1 shows a typical section along Mall of Georgia Boulevard, with this photograph taken facing east at Nature Center Parkway.

Photograph 1 – Mall of Georgia Boulevard Facing East at Nature Center Parkway

3.2 Woodward Crossing Boulevard

Woodward Crossing Boulevard is a median divided boulevard with a generally west-to-east orientation. It begins at Buford Drive and connects to Mall of Georgia Boulevard. There are exclusive left turn lanes at all median breaks and exclusive right turns at certain busier intersections. The road primarily serves retail shopping land uses including a large regional mall and multiple strip shopping centers, with the eastern end of the road lined with mostly undeveloped land. The terrain along Woodward Crossing Boulevard is gently rolling and the posted speed limit is 45 mph. Photograph 2 shows a typical section of Woodward Crossing Boulevard, with this photograph facing toward the east from the proximity of Crossing View Road.

Photograph 2 – Woodward Crossing Boulevard Facing East Near Crossing View Road

3.3 Buford Drive (SR 20)

Buford Drive (Georgia State Route 20) is a major arterial with a generally north-south orientation in the vicinity of the proposed development. The road has three through travel lanes in each direction with a landscaped median and exclusive turn lanes at major intersections. SR 20 has an interchange with Interstate 85 just south of Mall of Georgia Boulevard, and an interchange with Interstate 985 to the north. The development along the nearby section of SR 20 is primarily retail strip shopping centers and a regional mall. Residential land uses are located behind some of this retail frontage. The terrain along SR 20 is very gently rolling and the posted speed limit in the vicinity of the subject development is 45 mph. Photograph 3 is taken facing north along SR 20 at Mall of Georgia Boulevard.

Photograph 3 – SR 20 Facing North at Mall of Georgia Boulevard

3.4 Gravel Springs Road (SR 324)

Gravel Springs Road (Georgia State Route 324) is an east-west median divided highway that begins at SR 20 and continues across Interstate 85, to the southeast. There are two through travel lanes in each direction with exclusive left and right turn lanes provided at major intersections. Development along SR 324 is primarily residential, the terrain is gently rolling, and the posted speed limit is 45 mph. An interchange between SR 324 and Interstate 85 is programmed for the future, with an official completion date of 2024. More information about this interchange project is provided later in this report. Photograph 4 shows a typical section of SR 324, with this photograph facing west from Cedar Glade Lane, which is an access to a residential townhome development across from the terminus of Mall of Georgia Boulevard.

Photograph 4 – SR 324 Facing West from Cedar Glade Lane

3.5 Transit Service

Gwinnett County Transit operates bus service through portions of Gwinnett County, but there are no bus routes that travel in close proximity to the Destinations site. The Georgia Regional Transportation Authority (GRTA) operates an express bus service, with Route 411 traveling from Buford Drive (and Hamilton Mill Road) to Midtown Atlanta.

3.6 Bicycle and Pedestrian Facilities

Sidewalks are located on both sides of Mall of Georgia Boulevard and Woodward Crossing Boulevard, as well as along both sides of Gravel Springs Road and Buford Drive. In addition, the proposed development site plan includes a pedestrian bridge across Ivy Creek from the project to the Mall of Georgia. Pedestrian signals and crosswalks are provided on most approaches at all of the signalized study intersections. Therefore, pedestrians are well accommodated in the vicinity of the project. That said, the developments in this area are suburban in character with large parking lots in front of most retail shopping and substantial distances between developments. Observations revealed minimal pedestrian activity during peak times and it is suspected that most pedestrian activity in the area is for recreation and exercise. There are no dedicated or shared striped bicycle lanes adjacent to the subject site.

4. Project Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed Destinations development, including a site description, how much traffic the project will generate, and where that traffic will travel.

4.1 Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed Destinations development. Trip generation was calculated using the standard rates and equations from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th edition. The raw trip generation for the retail and restaurants was calculated using ITE Land Use 820 – Shopping Center. The trips for the grocery store were calculated using ITE Land Use 850 – Supermarket. The family entertainment center trips were calculated using ITE Land Use 425 – Multipurpose Recreational Facility. Solid p.m. peak hour data was available for this land use, but the a.m., 24 hour, and Saturday data was limited. Therefore, a ratio was developed for the p.m. peak of adjacent street data between the standard data and data with one observation. This ratio was then applied to the limited data during the other time periods to develop trip projections for those time periods. The hotel trips were calculated using ITE Land Use 310 – Hotel. The trips for the apartments and condominiums were calculated using ITE Land Use 220 – Apartment, and ITE Land Use – 230 – Residential Condominium / Townhouse, respectively. The office trips were calculated using ITE Land Use 710 – General Office Building.

The Destinations project may, during construction, substitute up to a maximum of 240 additional apartments for the office component of the project. These additional apartments would generate 121 a.m. trips (compared with the 178 office trips), 150 p.m. trips (compared with the 181 office trips), and 188 Saturday peak hour trips (compared with the 39 office trips). Therefore, the project impact will be higher during the weekday peak times with the office development. As would be expected, the office would have a lower impact than the apartments on the weekends. Since the office impact is greater during two of the three time periods, the analysis includes the currently-anticipated office use to provide the more conservative (higher) impact during those time periods. Should the office component be replaced with the additional residential units, the resulting project impact can be expected to be slightly lower during the weekday morning and evening peaks and slightly higher during the Saturday afternoon peak.

Several adjustments were applied to the raw trip generation. First, a multi-use adjustment was developed based on the methodology proscribed in the ITE *Trip Generation Manual, Volume 1: User's Guide and Handbook* (ITE Handbook). This methodology is used to calculate how many trips will occur between compatible land uses within the Destinations project. For example, some of the residential trips that are included in the raw trip generation calculations include trips that will travel to and from a grocery store. Since Destinations includes a grocery store, these trips will be accommodated within the property and will not be new external trips from the site. Therefore, these trips are subtracted from the raw project trip generation.

In addition, an adjustment was made to the retail, restaurant, grocery store, and entertainment center trips to account for the effect of pass-by trips. Pass-by trips are trips that are already driving by the property, but will

be intercepted by the Destinations project. For example, a trip that is now currently traveling eastbound on Mall of Georgia Boulevard in the evening peak hour, may turn into Destinations to grocery shop, then return to Mall of Georgia Boulevard and continue enroute to its final destination. These trips are new to the Destinations driveways, but do not represent new trips to the adjacent roadways, since they are currently occurring and are, therefore, included in the existing traffic volume counts. The ITE *Handbook* provides formulas to calculate pass-by percentages for certain retail land uses. These formulas yield a p.m. peak hour pass-by percentage of 36% for the shopping center (retail shops and restaurants), a Saturday midday percentage of 36% for the shopping center, and a p.m. peak hour pass-by percentage of 36% for the supermarket. No pass-by percentages are provided for the family entertainment center, but it is expected that these will be lower than that of the shopping center and grocery store, since the entertainment center is expected to be more destination-oriented. In order to be conservative (smaller reductions), a pass by percentage of 30% was applied to the total retail trips for the p.m. and Saturday peak hours, while a 20% reduction was applied to the a.m. and 24-hour time periods.

The Destinations site plan calls for a pedestrian bridge across Ivy Creek from the site to the eastern portion of the Mall of Georgia property. This will facilitate and encourage walking between the properties, which may replace some vehicular trips. To be conservative, and given the conditions in the area, it was decided not to subtract any trips from the Destinations vehicular trip generation projections to account for pedestrian activity. While it is acknowledged that some vehicular trips will be replaced by walking, and the east entrance to the Mall of Georgia itself will be fairly close to the pedestrian bridge, it is also recognized that, as described previously, this area is suburban in character, most development is surrounded by parking lots, and distances are significant between land uses. Therefore, it is expected that much of the pedestrian activity from Destinations will be for recreation and exercise and that most peak hour purpose-motivated trips will be made by automobile. Since there are no dedicated bicycle lanes or mass transit available adjacent to the Destinations site, no trip reductions were made for these modes, either. It was reported previously that there is a GRTA express bus stop on Buford Drive with a route directly to Midtown Atlanta. However, due to the distance of this bus stop from Destinations, it is expected that the use of this bus from Destinations will be moderate, and/or the trips between Destinations and the bus stop may be made by automobile, and thus the reductions in project trips due to the GRTA express bus stop will be minimal. The choice to not employ any pedestrian, bicycle, and transit reductions results in trip projections that are realistic, if slightly conservatively-high.

Table 4 presents the trip generation calculations for the Destinations project. The worksheets with the multi-use calculations are included in Appendix C.

Table 4 – Destinations Trip Generation

Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour			24-Hour	Saturday Peak Hour		
			Enter	Exit	2-Way	Enter	Exit	2-Way	2-Way	Enter	Exit	2-Way
Retail and Restaurants (A, B, D, F, H, Outparcel)	820	131,820 ft²	114	72	186	346	375	721	8,126	544	502	1,046
Grocery Store (A)	850	35,000 ft²	74	45	119	183	175	358	3,734	253	143	496
Entertainment Center (B)*	435	50,000 ft²	30	30	60	98	81	179	2,802	190	190	380
Retail Subtotal			218	147	365	627	631	1,258	14,662	987	835	1,922
-multi-use			-33	-16	-49	-69	-86	-155	-1,683	-53	-66	-119
subtotal			185	131	316	558	545	1,103	12,979	934	769	1,803
-pass-by			-37	-26	-63	-167	-164	-331	-2,596	-280	-231	-511
Retail New Trips			148	105	253	391	382	772	10,383	654	538	1292
Hotel (E)	310	250 room	96	69	165	86	89	175	2,230	109	109	218
Apartments (A)	220	352 units	36	144	180	140	76	216	2,306	84	83	167
Condominiums (E)	230	40 units	4	21	25	19	9	28	290	29	25	54
Hotel/Residential Subtotal			136	234	370	245	174	419	4,826	222	217	439
-multi-use			-13	-29	-42	-79	-56	-135	-1,468	-58	-49	-107
Hotel/Residential New Trips			123	205	328	166	118	284	3,358	164	168	332
Office (H)	710	91,200 ft²	156	22	178	31	150	181	1,224	21	18	39
-multi-use			-6	-7	-13	-10	-16	-26	-239	-8	-4	-12
Office New Trips			150	15	165	21	134	155	985	13	14	27
Summary												
Total Raw Trips			510	403	913	903	955	1,858	20,712	1,230	1,070	2,300
-multi-use			-52	-52	-104	-158	-158	-316	-3,390	-119	-119	-238
-pass-by			-37	-26	-63	-167	-164	-331	-2,596	-280	-231	-511
Total New Trips			421	325	746	578	634	1,211	14,726	831	720	1,551

*see text for explanation

4.2 Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The trip distribution percentages for the retail, restaurants, and family entertainment center were developed based on population densities in the area and the distances of those populations to the site (an approximation of a gravity model). The trip distribution for the residential and hotel uses was developed based on the locations and proximity of likely trip origins and destinations, such as other retail and offices in the area, other regional trip attractors and employment centers such as the City of Atlanta and the City of Lawrenceville, and the major routes of travel to those attractors, including Interstates 85 and 985. The distances to these trip attractors were considered, but less so than for the retail distribution percentages. The office distribution percentages were also based on population densities, but with just minimal consideration given to the distances

to those populations. The logic here is that motorists will typically drive significantly greater distances for employment trips than for shopping or dining. The new project trips, shown in Table 4, were assigned to the roadway network based on the percentages for each land use grouping. The trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the Destinations project, are shown in Figure 4, while the distribution percentages and Saturday peak hour trips are presented in Figure 5.

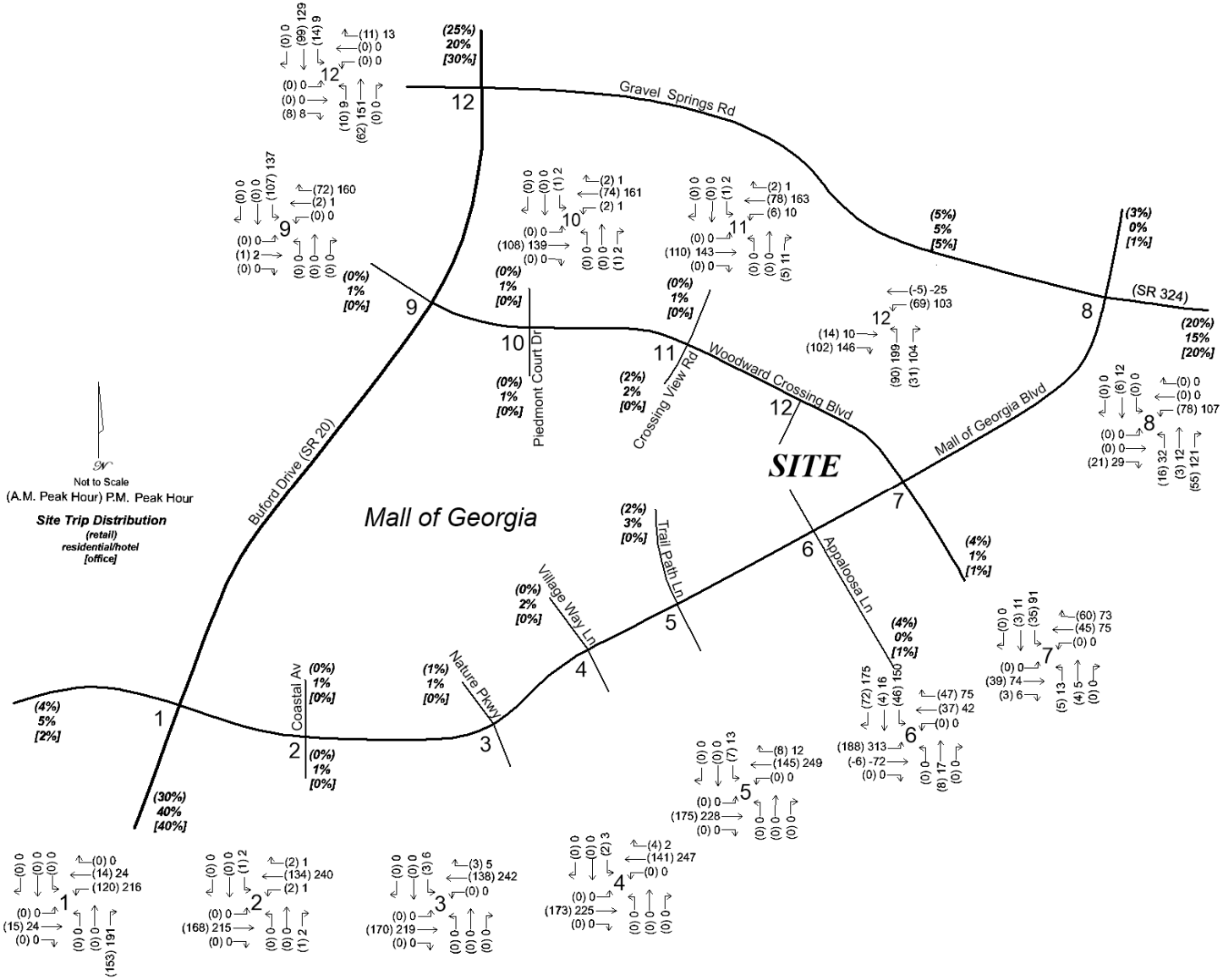

Figure 4 – Destinations Trip Distribution Percentages and Weekday A.M. and P.M. Site-Generated Trips

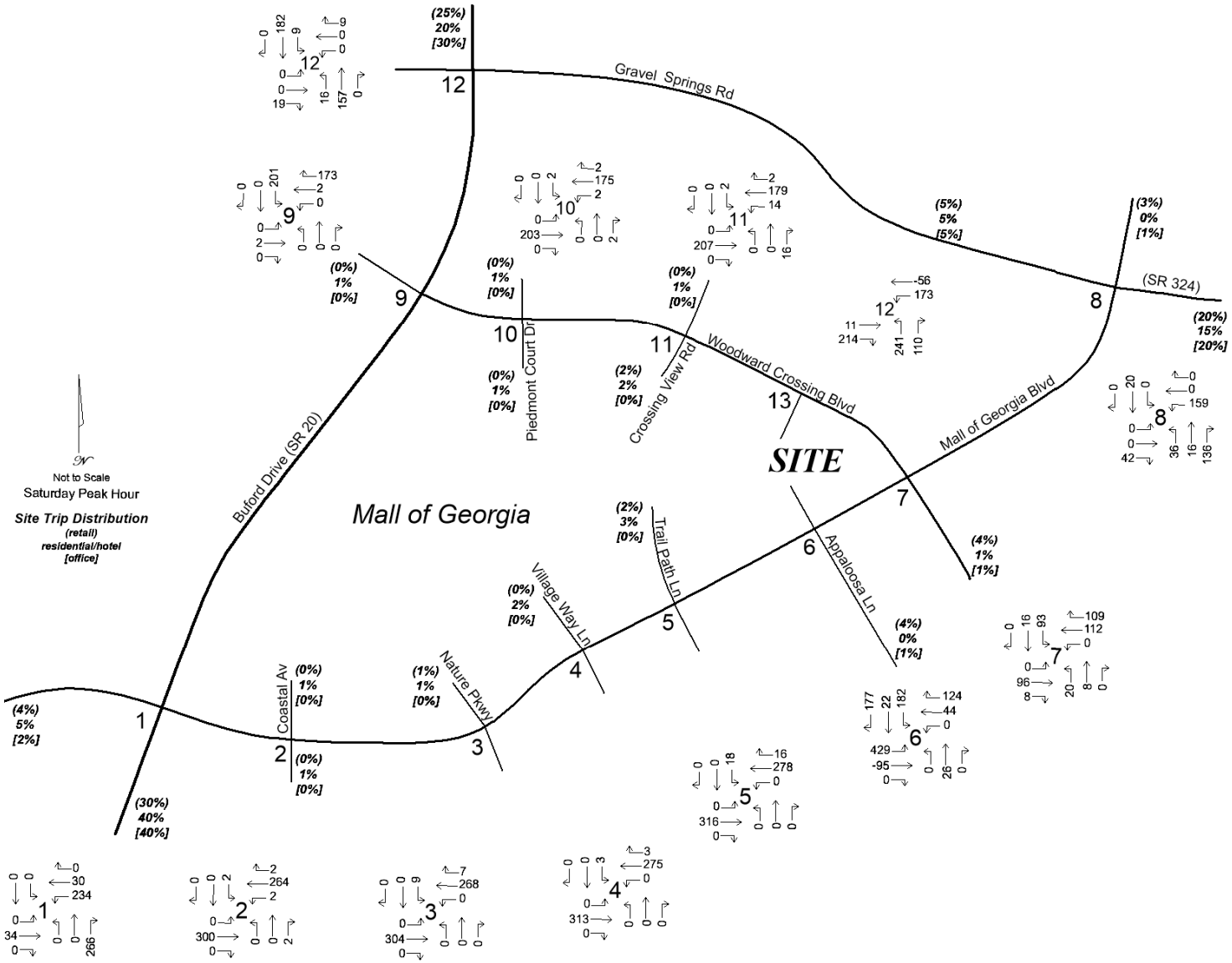

Figure 5 – Destinations Trip Distribution Percentages and Saturday Site-Generated Trips

5. Existing Traffic Analysis

This chapter presents the results of the capacity analysis and facilities needs analysis for the existing condition.

5.1 Existing Lanes and Traffic Control

A description of the existing conditions was provided previously in this report. Figure 6 presents the existing lane configuration and method of traffic control at each study intersection.

5.2 Existing Traffic Volumes

Existing full turning movement traffic volume counts were collected at the existing intersections (1 – 12, presented previously in Table 3) in the study network.

The weekday counts were collected on Tuesday March 22 and Wednesday March 23, 2016, from 7:00 a.m. to 9:00 a.m. and from 4:30 p.m. to 6:30 p.m. The Saturday counts were collected on March 12 and March 19, 2016 from 3:00 p.m. to 6:00 p.m. Gwinnett County public schools were in standard session on the weekdays on which the counts were recorded. The counts at Intersection 12 – SR 20 at SR 324, were collected on Wednesday, June 15 and Saturday, June 18, 2016. Schools were not in standard session when these June counts were performed, so these counts were balanced with the counts collected at adjacent intersections in March.

From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour and Saturday peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 7 and the Saturday peak hour volumes are shown in Figure 8. The intersection raw count data is found in Appendix B.

In addition to the intersection turning movement counts, Georgia Department of Transportation (GDOT) and Gwinnett County average annual daily traffic (AADT) volume counts were obtained on nearby roadways in this section of Gwinnett County. These counts include: Mall of Georgia Boulevard west of Woodward Crossing Boulevard: 13,040 vehicles per day (vpd) (2015 Gwinnett), Mall of Georgia Boulevard east of Woodward Crossing Boulevard: 16,363 vpd (2015 Gwinnett), Woodward Crossing Boulevard west of Mall of Georgia Boulevard: 5,986 vpd (2015 Gwinnett), Gravel Springs Road east of Mall of Georgia Boulevard: 22,600 vpd (2014 GDOT), and Buford Drive south of Mall of Georgia main entrance: 41,400 vpd (2014 GDOT). Table 6, presented in the No-Build Traffic Analysis section of this report, shows the historic Georgia DOT counts and the annual growth rates between the counts.

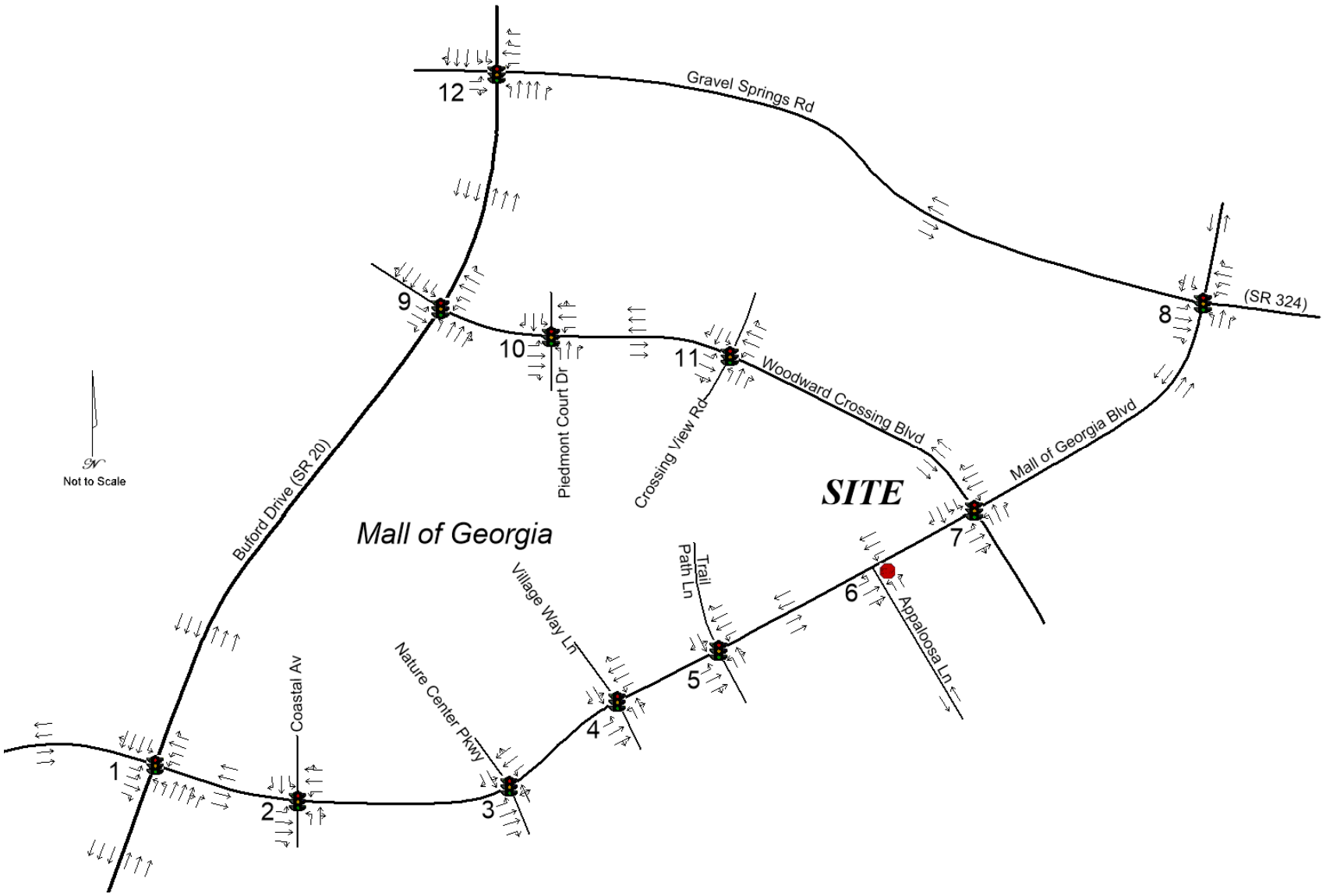

Figure 6 – Existing Lane Configuration and Traffic Control

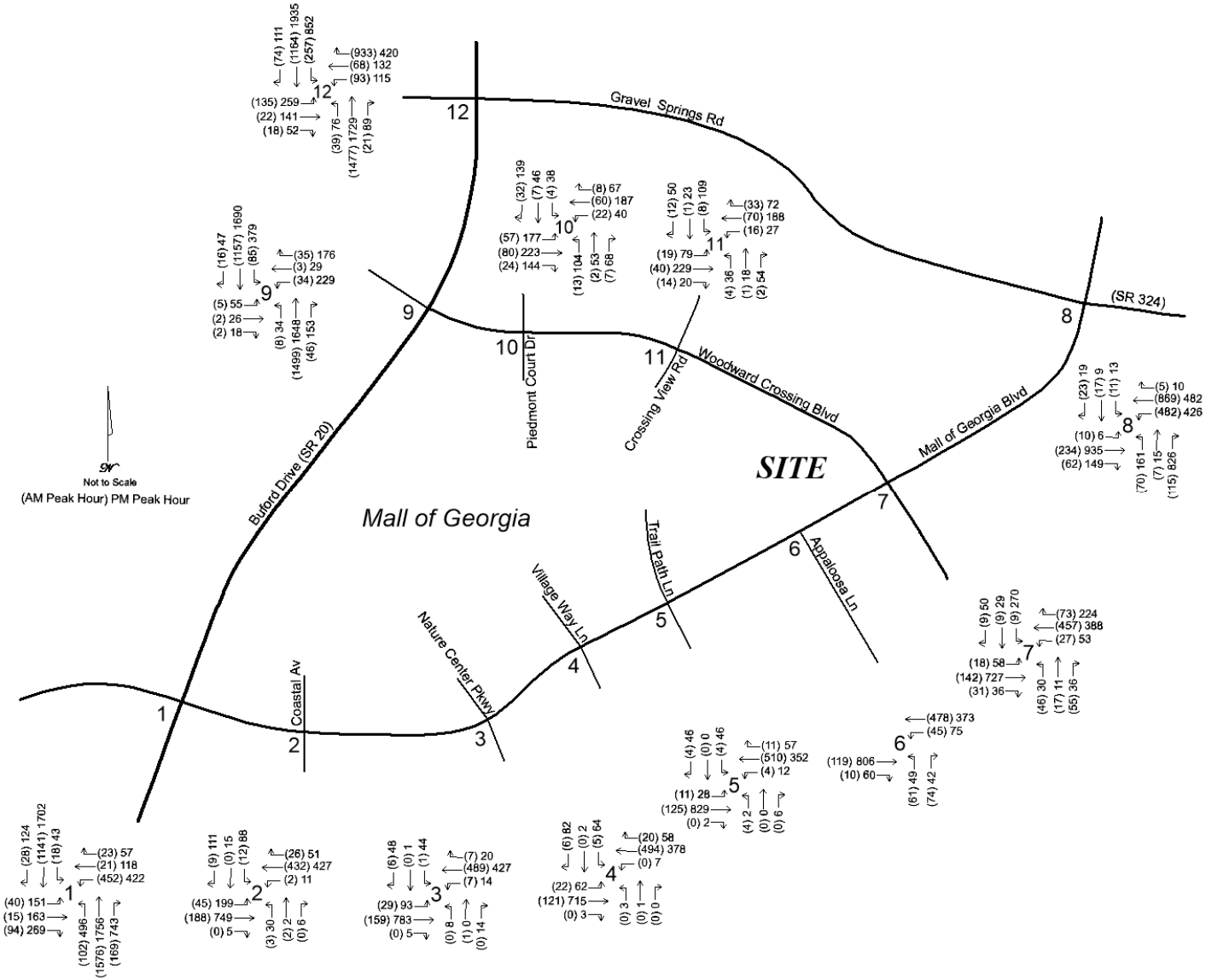

Figure 7 – Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

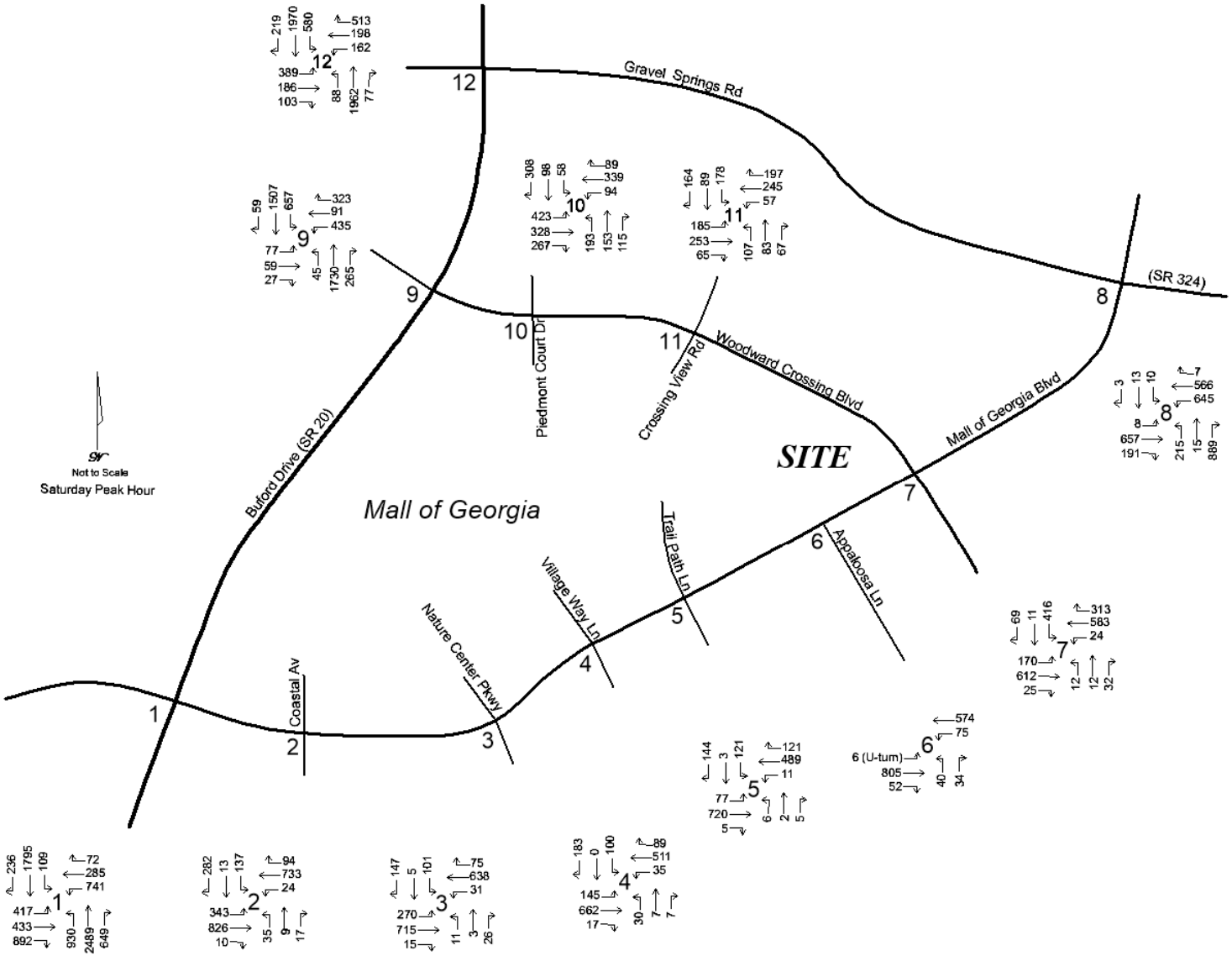

Figure 8 – Existing Saturday Peak Hour Traffic Volumes

5.3 Existing Intersection Operations

An analysis was performed for each existing study intersection, based on the counted traffic volumes, existing lane configurations, and method of traffic control. The results of the analysis are shown in Table 5. The Synchro computer printouts, which provide detailed analysis information, are included in Appendix D.

Table 5 – Existing Intersection Levels of Service

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour		Sat. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Buford Drive (SR 20) at Mall of Georgia Blvd	D	35.9	*E*	*58.8*	*F*	*211.7*
northbound approach	C	30.9	D	37.0	*F*	*127.0*
southbound approach	B	17.9	D	45.3	*F*	*232.3*
eastbound approach	*F*	*97.9*	*F*	*186.3*	*F*	*380.4*
westbound approach	*E*	*78.9*	*E*	*74.4*	*F*	*211.6*
2. Mall of Georgia Boulevard at Coastal Avenue	D	35.6	C	30.5	C	26.6
northbound approach	A	6.4	B	12.3	B	17.5
southbound approach	A	6.5	B	13.0	C	22.2
eastbound approach	C	32.8	C	32.2	B	19.2
westbound approach	D	40.1	D	36.9	D	40.2
3. Mall of Georgia Blvd at Nature Center Parkway	C	26.8	C	21.7	B	14.4
northbound approach	A	6.5	A	9.6	B	14.7
southbound approach	A	6.5	A	9.8	B	16.3
eastbound approach	C	32.9	B	16.2	A	9.4
westbound approach	C	25.1	D	35.6	C	20.0
4. Mall of Georgia Boulevard at Village Way Lane	D	35.2	B	17.7	C	30.3
northbound approach	A	0.0	A	8.9	B	11.7
southbound approach	A	7.4	A	8.8	B	11.8
eastbound approach	C	28.7	B	19.0	C	34.5
westbound approach	D	38.1	B	18.9	D	36.1
5. Mall of Georgia Boulevard at Trail Path Lane	C	24.4	B	14.7	C	21.2
northbound approach	A	6.7	A	9.9	B	10.1
southbound approach	A	6.6	B	10.2	B	10.4
eastbound approach	C	32.5	B	15.9	B	17.1
westbound approach	C	22.9	B	13.6	C	32.1
6. Mall of Georgia Boulevard at Appaloosa Lane	A	2.6	A	2.8	A	2.2
northbound left turn	B	0.6	*E*	*44.8*	*E*	*46.0*
northbound right turn	A	9.1	B	12.1	B	11.8
eastbound U-Turn	A	0.0	A	0.0	A	8.7
westbound left turn	A	7.6	B	10.4	B	10.2

7. Mall of Georgia Blvd at Woodward Crossing Blvd	C	32.4	C	30.2	C	28.0
northbound approach	C	28.8	D	36.4	C	31.3
southbound approach	C	22.0	D	36.4	D	37.7
eastbound approach	D	35.3	C	30.7	B	14.3
westbound approach	C	32.8	C	25.3	C	34.5
8. Gravel Springs Rd (SR 324) at Mall of Georgia Blvd	C	28.3	***E***	***65.5***	***F***	***84.5***
northbound approach	B	12.7	***F***	***105.4***	***F***	***151.7***
southbound approach	B	11.5	B	13.9	B	13.7
eastbound approach	C	33.9	D	50.3	***E***	***60.0***
westbound approach	C	30.3	D	42.4	D	41.1
9. Buford Drive (SR 20) at Woodward Crossing Blvd	B	12.1	C	32.1	D	50.2
northbound approach	A	4.6	B	17.5	D	47.3
southbound approach	B	15.8	C	31.1	D	40.7
eastbound approach	***F***	***89.5***	***F***	***97.0***	***F***	***105.5***
westbound approach	***F***	***87.0***	***F***	***82.5***	***E***	***67.7***
10. Woodward Crossing Blvd at Piedmont Court Dr	C	31.0	C	24.2	C	24.9
northbound approach	A	2.8	A	7.5	C	20.9
southbound approach	A	2.7	A	6.9	B	16.4
eastbound approach	D	38.7	C	30.4	C	25.0
westbound approach	D	41.8	D	37.8	D	36.7
11. Woodward Crossing Blvd at Crossing View Road	D	36.9	C	26.6	C	21.9
northbound approach	A	2.1	A	4.7	A	9.7
southbound approach	A	2.1	A	5.1	B	10.4
eastbound approach	D	41.4	D	35.3	C	27.0
westbound approach	D	42.3	D	37.9	C	34.2
12. Buford Dr (SR 20) at Gravel Springs Rd (SR 324)	D	48.3	D	46.6	D	54.2
northbound approach	D	44.2	***E***	***55.3***	***E***	***56.2***
southbound approach	D	48.8	C	33.2	D	42.0
eastbound approach	***F***	***97.8***	***F***	***102.0***	***F***	***101.7***
westbound approach	D	45.9	D	44.0	D	50.8

5.4 Existing Facilities Needs Analysis

The analysis of existing conditions reveals that the following locations do not meet the LOS D standard:

1. Buford Drive at Mall of Georgia Boulevard – overall intersection: p.m., Saturday, and specific approaches during all time periods
6. Mall of Georgia at Appaloosa Lane – northbound left turn: p.m., Saturday
8. Gravel Springs Road at Mall of Georgia Boulevard – overall intersection: p.m., Saturday, and specific approaches during p.m., Saturday
9. Buford Drive at Woodward Crossing Boulevard – eastbound and westbound approaches: all time periods
12. Buford Drive at Gravel Springs Road – northbound approach: p.m., Saturday, eastbound approach: all time periods

Intersection 1 – Buford Drive at Mall of Georgia Boulevard

At the SR 20 / Mall of Georgia Boulevard intersection, the lane configuration is somewhat "maxed-out" with three through lanes in each direction on SR 20 and dual left turn lanes on three of the four approaches. Without widening, a second exclusive left turn lane can be added on southbound SR 20, in the area that is currently striped-out between the through lanes and the left turn lane. However, the volume making that southbound left turn movement is relatively low, with 18, 43, and 109 vehicles making that movement in the a.m., p.m., and Saturday peaks, respectively. Testing the addition of the second southbound left turn lane, evaluating alternative phasing schemes, and varying the cycle lengths, had minimal benefit. It is concluded that this intersection currently operates fairly optimally given the demands placed on it.

The addition of a second eastbound exclusive right turn lane and accompanying right turn overlap phase would improve operations. This right turn volume is a modest 94 in the a.m., a more significant 269 in the p.m., but a substantial 892 in the Saturday peak. The addition of this second right turn lane and protected right turn overlap phase (which runs concurrently with the northbound protected left turn phase; this is comparable to the current overlap phase on the northbound right turn movement on SR 20) will substantially reduce the overall delay at this interaction on the Saturday peak (the time of highest delays). The intersection would still operate at LOS F during the Saturday peak, but the benefits would be significant, with the HCM analysis showing the potential for an almost 60 second reduction in average delay just by providing the overlap phase, and an almost 100 second reduction in average delay per vehicle with the addition of the second right turn lane. It appears that this additional turn lane would require the taking of some right-of-way from the property on the southwest corner of the intersection, and may cause the reduction in some parking on that property. However, the overlap phase could be added with relatively minor impact and cost. In order to mitigate this intersection to the LOS D standard, major roadway widening would be required. However, the analysis revealed that, even with the addition of a northbound and southbound through lane on Buford Drive, plus the aforementioned second eastbound right turn lane, the intersection will still operate at LOS F in the Saturday peak hour.

Finally, at this intersection, it is noted that the Mall of Georgia street name sign in the northeast corner of the intersection partially obscures the pedestrian crossing signal for northbound pedestrians crossing the east leg. Additionally, there is no advance warning sign for pedestrians (R560-5, "State Law, Stop for Pedestrians in Crosswalk") on either the northbound approach or eastbound approach – these two approaches have right turn islands and Georgia DOT policy requires this signage in advance of crosswalks at free-flowing or yield controlled right turn channelized islands. These pedestrian safety issues should be corrected at this intersection.

Intersection 6 – Mall of Georgia at Appaloosa Lane

Appaloosa Lane is the only existing side street stop sign controlled approach in this study. The northbound left turn movement currently experiences LOS E in the p.m. and Saturday peaks. This is not unusual at side street stop controlled approaches at busy thoroughfares such as Mall of Georgia Boulevard. These delays can be reduced by the installation of a traffic signal, and signalization may become necessary as volumes increase in the future. In order to determine if signalization is justified, a signal warrant study should be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices*. With signalization, this intersection would operate at LOS A during all time periods and the northbound, side street approach would operate at LOS B during the Saturday peak hour (the time of highest delay).

Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard

At SR 324 at Mall of Georgia Boulevard, the northbound right turn movement from Mall of Georgia Boulevard is a modest 115 in the a.m. peak hour, but soars to 826 in the p.m. and 889 in the Saturday peak. This movement is currently only served by a single exclusive right turn lane with no protected overlap phase. The addition of the northbound right turn overlap phase, to run concurrently with the westbound protected left turn phase will improve the Saturday peak level of service from LOS F to LOS C. Therefore, this improvement is recommended for the existing condition. The addition of a second exclusive right turn lane will reduce the delays further, and the County, or Georgia DOT should consider adding this lane. But, the most benefit, with only relatively modest cost, would be realized by the overlap phasing.

It is noted that the northbound and southbound approaches at this intersection (Mall of Georgia Boulevard and Cedar Glade Lane, respectively) share a green ball phasing. A concern about this phasing is that the northbound left turn movement from Mall of Georgia Boulevard is very heavy while the southbound through movement from Cedar Glade Lane is very low (17, 9, and 13, in the a.m., p.m., and Saturday peak hours). This has the tendency for heavy northbound left turn flow to fail to recognize that they are required to yield to southbound through and right turn vehicles. This could present a safety concern when northbound left turners fail to yield right-of-way to southbound vehicles that might be expecting it. Implementing a northbound protected left turn phase may improve the situation. At a minimum, an overhead sign informing northbound left turners to yield to southbound traffic would improve safety.

Intersection 9 – Buford Drive at Woodward Crossing Boulevard

Woodward Crossing Boulevard incurs side street approach LOS F at SR 20. This is due to the optimization of the signal phasing, which allocates a higher proportion of greentime to SR 20 due to the significantly higher volumes on that road. The result is that less greentime is available for the side street approaches. However, because the delays are reduced for the much higher volumes on SR 20, the overall intersection delays and LOS is acceptable at all time periods. One way to reduce the side street delays would be to reallocate greentime to the side street approaches, but this would increase delays on SR 20. The signal at this intersection operates efficiently now and no changes are recommended at this intersection at this time.

Intersection 12 – Buford Drive at Gravel Springs Road

As with intersection 9, this overall intersection operates acceptably, with LOS D overall at all peak times. The northbound approach competes for greentime with the eastbound approach, and produces LOS F on the eastbound approach and LOS E on the northbound approach. Additional lanes that would provide some benefit include an eastbound exclusive right turn lane exiting Financial Center Way and a southbound exclusive right turn lane on Buford Drive. However, adding both of these lanes still does not achieve LOS D on the northbound or eastbound approaches. It is suggested that the higher delays on the eastbound, minor street approach are the reasonable compromise for overall intersection levels of service. Since the overall intersection operates acceptably, and the implementation of these improvements does not achieve LOS D for all approaches, the addition of the eastbound and southbound right turn lanes is only advised as a possibility for consideration.

5.5 Other Recommendations for Existing Conditions

At Intersection 2, Coastal Avenue, the striping on the side street approaches is faded and should be refreshed. This includes the turn arrows and crosswalks.

At Intersection 3, Nature Center Parkway, the westbound left turn lane on Mall of Georgia Boulevard is striped with a U-Turn designation and there is no overhead sign indicating that westbound left turns should yield on the green ball. The County may consider changing the U-Turn arrows to left turn arrows and adding the signage to the mast arm, consistent with the eastbound approach.

At Intersection 4, Village Way Lane, the northbound approach exiting the retail shopping center is striped improperly, with the centerline striped with a single solid white stripe. This should be replaced with double yellow striping, as appropriate for separating opposing directions of flow. There are no crosswalk or pedestrian signals on the southern leg and the eastern leg at this intersection. The County may consider installing both on these two approaches. As with the Nature Center Parkway intersection, the westbound left turn lane is striped with a U-Turn arrow and there is no overhead left turn yield on green ball sign on the mast arm.

At Intersection 5, Trail Path Lane, there is a crosswalk across the northbound approach, but no pedestrian signals, and there are no crosswalk or pedestrian signals on the east leg. There is a left turn yield on green ball sign on both the eastbound and westbound approaches, but the westbound left turn is striped with U-Turn

arrows. The lane lines and turn arrow striping on the southbound approach on Trail Path Lane are very worn and should be replaced.

At Intersection 11, Woodward Crossing Boulevard at Crossing View Road, the striped right turn islands do not include any cross-hatching. The County should consider adding this hatching pattern to increase the visibility of the islands.

The improvements identified in this section are based on existing conditions and should be considered for implementation whether or not the proposed Destinations project is developed.

6. No-Build Traffic Analysis

A no-build analysis condition was developed for the DRI's build-out year of 2019. The no-build analysis provides a reference by which to measure the traffic impact of the proposed Destinations DRI.

6.1 No Build Lanes and Traffic Control

The no-build infrastructure assumes the following changes are made, based on the Existing Facilities Needs Analysis:

Intersection 1 – addition of second eastbound exclusive right turn lane and accompanying protected right turn overlap phase.

Intersection 8 – addition of northbound protected right turn overlap phase.

6.2 No-Build Traffic Volumes

The no-build condition includes background increases in traffic volumes that will occur whether or not the Destinations DRI is built. Georgia DOT historic traffic volume count data was collected at the two GDOT count stations closest to the subject development – Gravel Springs Road east of Mall of Georgia Boulevard and Buford Drive south of the Mall of Georgia main entrance. The data was obtained for the years 2010 through 2014 (the last year for which data was available at the time this study was performed). This data was used to develop annual growth rates for each year, and an overall growth percentage from 2010 to 2014. Table 6 presents this historic GDOT data and the growth rates.

Table 6 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	SR 324 E of Mall of GA Blvd	Annual Growth	SR 20 S of Mall main entrance	Annual Growth
Station ID	1350258		1350121	
2010	19,390		33,570	
2011	17,110	-11.8%	33,890	1.0%
2012	17,010	-0.6%	43,610	28.7%
2013	22,620	33.0%	43,740	0.3%
2014	22,600	-0.1%	41,600	-4.9%
Average Annual Growth		3.9%		5.5%

On Gravel Springs Road, 33% growth occurred between 2012 and 2013. However, the other four years showed a decrease in volumes each year, but the decrease in the last year was minimal. On Buford Drive, strong growth was experienced between 2011 and 2012, but 2011 and 2013 saw minimal growth and the last year of the data revealed a decrease in volumes. Therefore, no clear growth trend was discernable at either count station. The overall annual growth rate, taken by comparing the 2014 volumes with the 2010 volumes, revealed an average annual growth rate of 3.9% on Gravel Springs Road and 5.5% on Buford Drive. Based on a review of the overall

trends, and the annual fluctuations, it was decided to employ an annual growth rate of 4.0% to the counted intersection volumes, for three years, to the project anticipated build-out year of 2019. This equates to a growth rate of 12.5% applied to the counts collected for this study. Gwinnett County Planning Department confirmed that there were no other notable planned developments in the vicinity of the Destinations project. Therefore, the 12.5% growth rate accounts for all anticipated area growth and development that will occur until the project build-out in 2019. Figure 9 shows the no-build weekday a.m. and p.m. peak hour traffic volumes and Figure 10 shows the no-build Saturday peak hour volumes. These are the traffic volumes that will be at each study intersection when the Destinations project is completed and fully operational, but excluding the Destinations trips. These volumes are also shown in the intersection volume worksheets in Appendix C.

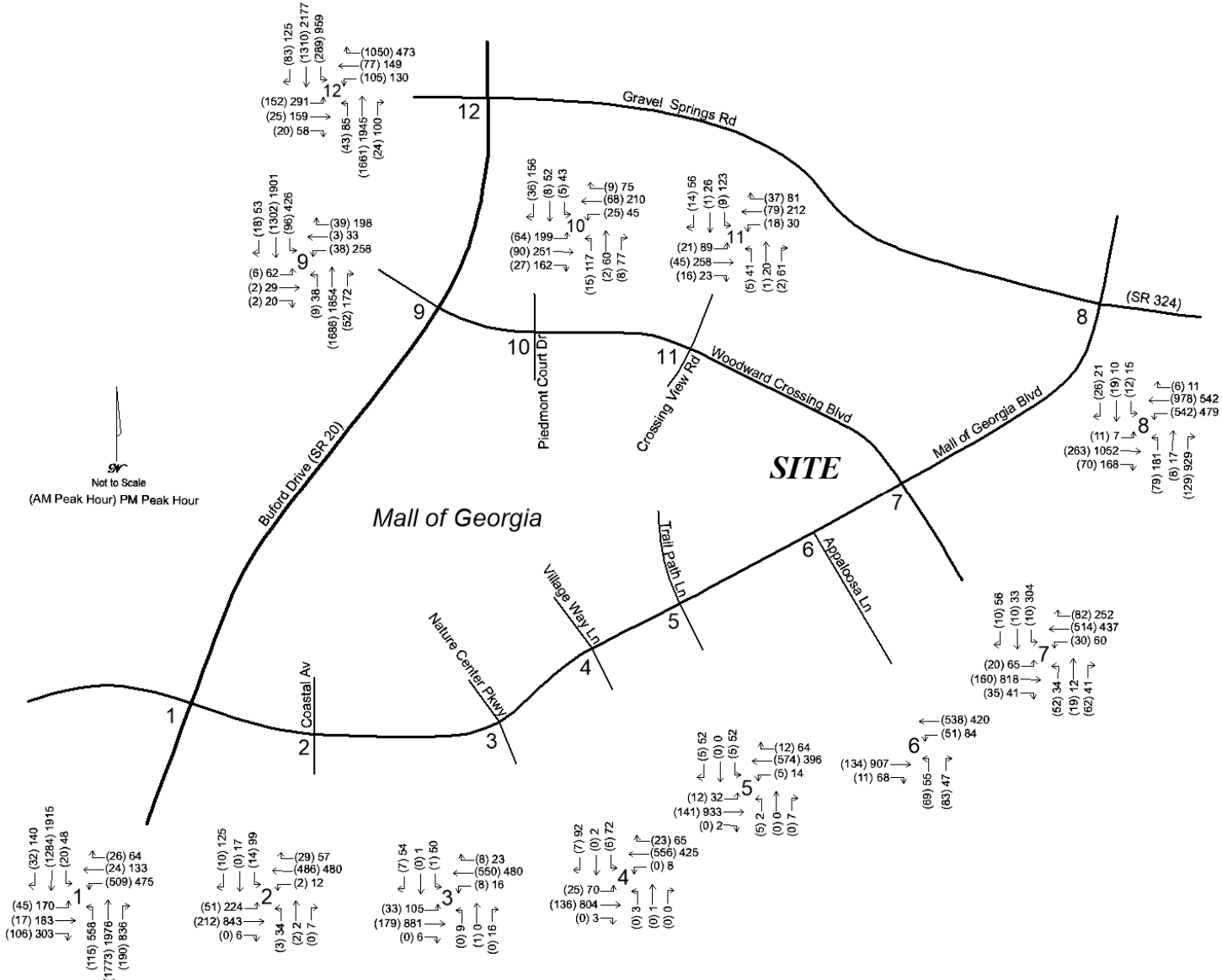

Figure 9 – No-Build Weekday A.M and P.M. Peak Hour Traffic Volume Projections

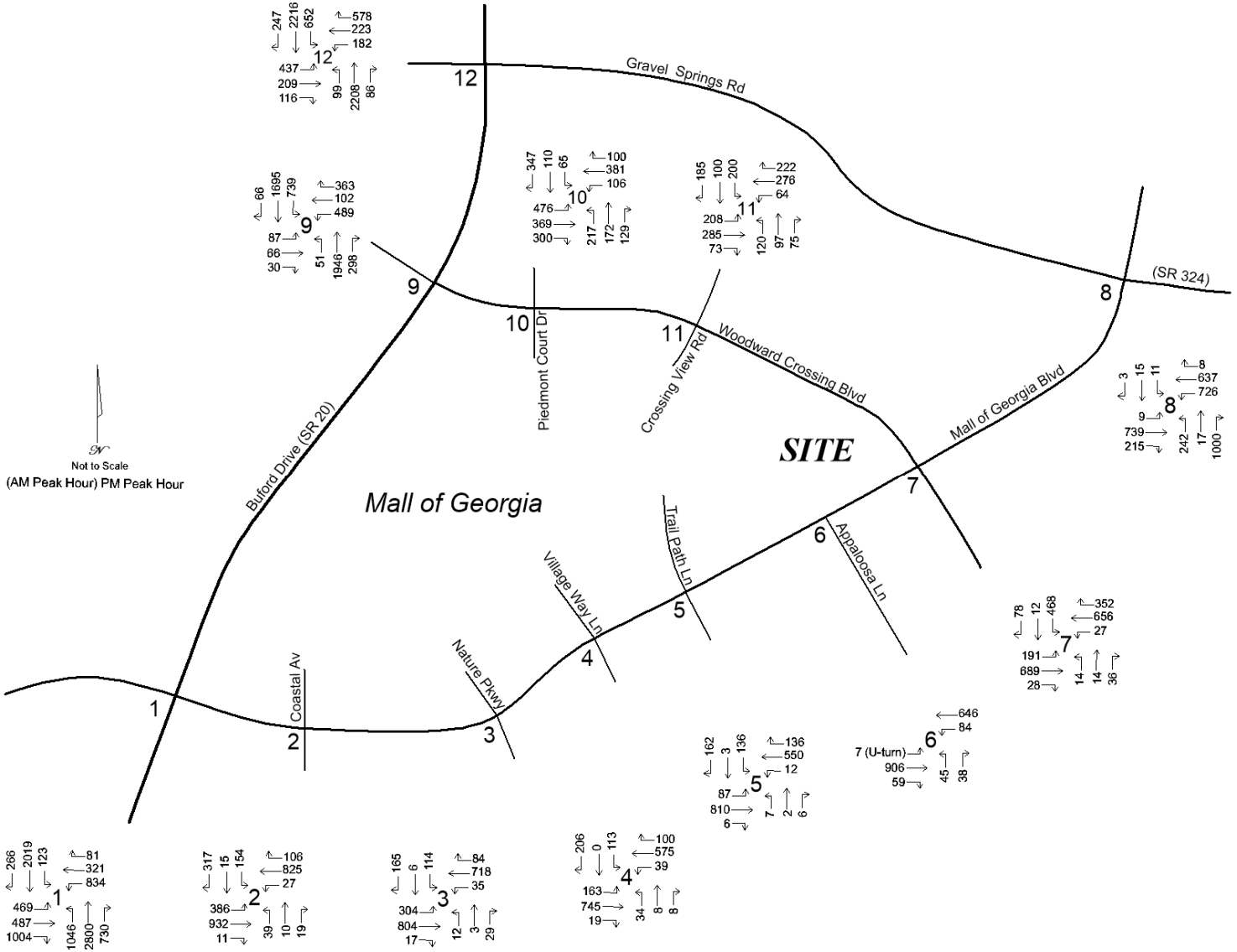

Figure 10 – No-Build Saturday Peak Hour Traffic Volume Projections

6.3 No-Build Intersection Operations

Each study intersection was evaluated for the 2019 no-build condition. The no-build levels of service at each intersection are shown in Table 7. The Synchro computer printouts are found in Appendix E.

Table 7 – Future No-Build Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour		Sat. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Buford Drive (SR 20) at Mall of Georgia Boulevard	D	35.4	D	52.1	*F*	*169.9*
northbound approach	C	31.4	D	38.4	*F*	*127.5*
southbound approach	B	18.5	*E*	*59.3*	*F*	*260.6*
eastbound approach	*E*	*79.3*	*E*	*73.7*	*F*	*122.6*
westbound approach	*E*	*77.7*	*E*	*75.1*	*F*	*221.6*
2. Mall of Georgia Boulevard at Coastal Avenue	C	30.4	C	29.8	C	25.8
northbound approach	A	7.1	B	14.5	B	19.8
southbound approach	A	7.3	B	15.4	C	26.8
eastbound approach	C	23.7	C	31.1	B	13.7
westbound approach	D	36.3	D	35.6	D	42.8
3. Mall of Georgia Blvd at Nature Center Parkway	C	25.0	B	19.6	B	14.5
northbound approach	A	7.4	B	11.2	B	16.7
southbound approach	A	7.4	B	11.6	B	19.5
eastbound approach	C	31.7	B	13.1	A	7.9
westbound approach	C	22.9	C	34.3	C	20.8
4. Mall of Georgia Boulevard at Village Way Lane	C	28.5	B	15.6	C	28.3
northbound approach	A	0.0	B	10.3	B	13.5
southbound approach	A	8.1	B	10.2	B	13.7
eastbound approach	C	24.6	B	16.4	C	29.8
westbound approach	C	30.6	B	16.5	D	35.5
5. Mall of Georgia Boulevard at Trail Path Lane	C	34.9	B	12.3	B	18.5
northbound approach	A	8.9	B	11.4	B	11.8
southbound approach	A	8.8	B	11.8	B	12.3
eastbound approach	C	29.7	B	13.1	B	14.5
westbound approach	D	37.1	B	11.0	C	27.0
6. Mall of Georgia Boulevard at Appaloosa Lane	A	2.8	A	4.1	A	3.0
northbound left turn	C	16.0	*F*	*75.0*	*F*	*74.0*
northbound right turn	A	9.3	B	13.0	B	12.6
eastbound U-Turn	A	0.0	A	0.0	A	8.9
westbound left turn	A	7.7	B	11.1	B	10.9

7. Mall of Georgia Blvd at Woodward Crossing Blvd	C	28.2	C	28.2	C	29.1
northbound approach	C	28.6	D	36.8	C	33.3
southbound approach	C	22.7	D	36.9	D	39.0
eastbound approach	C	20.5	C	26.6	B	13.3
westbound approach	C	31.5	C	24.2	D	37.3
8. Gravel Springs Rd (SR 324) at Mall of Georgia Blvd	C	26.8	D	47.7	D	43.0
northbound approach	A	9.6	***E***	***71.8***	***E***	***62.0***
southbound approach	B	13.4	C	20.7	C	21.5
eastbound approach	C	32.6	D	48.2	D	50.1
westbound approach	C	28.9	C	22.1	C	21.0
9. Buford Drive (SR 20) at Woodward Crossing Blvd	B	12.5	C	34.8	***E***	***62.1***
northbound approach	A	5.2	C	21.5	***E***	***71.2***
southbound approach	B	15.8	C	31.5	D	45.3
eastbound approach	***F***	***89.6***	***F***	***97.0***	***F***	***105.6***
westbound approach	***F***	***86.6***	***F***	***91.6***	***E***	***73.7***
10. Woodward Crossing Blvd at Piedmont Court Dr	C	30.6	C	24.0	C	26.7
northbound approach	A	3.1	A	8.7	C	29.9
southbound approach	A	3.0	A	7.8	B	19.7
eastbound approach	D	37.9	C	29.4	C	23.8
westbound approach	D	41.5	D	37.2	D	37.1
11. Woodward Crossing Blvd at Crossing View Road	D	36.6	C	26.2	C	22.3
northbound approach	A	2.2	A	5.3	B	11.0
southbound approach	A	2.2	A	5.7	B	12.0
eastbound approach	D	41.0	C	34.2	C	26.0
westbound approach	D	41.9	D	37.2	C	34.4
12. Buford Dr (SR 20) at Gravel Springs Rd (SR 324)	***E***	***55.6***	***E***	***55.5***	***E***	***67.7***
northbound approach	D	53.9	***E***	***59.7***	***E***	***60.9***
southbound approach	D	50.1	D	39.7	***E***	***55.0***
eastbound approach	***F***	***102.9***	***F***	***129.2***	***F***	***131.5***
westbound approach	***E***	***57.6***	***E***	***63.3***	***E***	***74.5***

6.4 No-Build Facilities Needs Analysis

The no-build analysis reveals that several locations will not meet the LOS D standard. However, a few of these locations were addressed in the existing condition analysis. Specifically, it was identified in the existing analysis that Intersection 1, Buford Drive at Mall of Georgia Boulevard, will operate at LOS F even with substantial mitigation, including the widening of Buford Drive. Since the LOS D standard cannot be achieved with this extensive mitigation, no additional mitigation is evaluated here. At Intersection 6, the northbound, stop sign controlled left turn from Appaloosa Lane will continue to operate at LOS F. As with the existing condition, a signal warrant analysis should be performed to determine if signalization is, or will be, satisfied at this intersection. Exclusive of these two noted exceptions, the analysis of the no-build condition reveals that the following locations do not meet the LOS D standard:

8. Gravel Springs Road at Mall of Georgia Boulevard – northbound approach: p.m., Saturday
9. Buford Drive at Woodward Crossing Boulevard – overall intersection: Saturday, several approaches: all time periods
12. Buford Drive at Gravel Springs Road – overall intersection: all time periods, several approaches: all time periods

Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard

The existing analysis identified the benefit of adding a second northbound exclusive right turn lane, in addition to the protected right turn overlap phase previously recommended for this movement. The addition of this right turn lane will allow the intersection and all approaches to operate at LOS D or better during all time periods.

Intersection 9 – Buford Drive at Woodward Crossing Boulevard

With the additional volumes added in the no-build condition, this intersection will deteriorate to LOS E in the Saturday peak, with several approaches not satisfying the LOS D standard at other times, as well. The addition of a northbound exclusive right turn lane on Buford Drive at Woodward Crossing Boulevard will allow the intersection to operate at LOS D or better at all time periods. However, some approaches will still not meet the LOS D standards.

The southbound left turn already has dual exclusive left turn lanes and the westbound right has an exclusive right turn lane and a shared through / right turn lane. An overlap phase cannot be provided for the shared through / right turn lane since that phase would operate concurrently with the southbound left turn protected phase (which would create a conflict between the westbound throughs and southbound lefts). However, a right turn channelizing island can be added to separate the right turn lane from the shared through right, and the exclusive right turn lane could receive the overlap phasing. This would be comparable to the existing northbound right turn overlap phase from SR 20 at Mall of Georgia Boulevard. The addition of the overlap phase further reduces intersection and approach delays, even though some approaches will still not achieve

LOS D in certain time periods. It is suggested that certain approach level of service will continue to experience high delays simply due to the optimal allocation of greentime, favoring the high volume approaches and movements and, conversely, providing insufficient greentime for the lower-volume movements. Allocating additional greentime to the eastbound approach, will increase delays on the other, busier approaches. Additional widening of Buford Drive would reduce the greentime requirements on this signal for the highest volume approaches. This major project, which would also have benefits at Intersections 1 and 12, may merit consideration by the Georgia DOT.

Intersection 12 – Buford Drive at Gravel Springs Road

The existing facilities needs analysis identified for consideration two laneage additions at this intersection, an eastbound right turn lane and a southbound right turn lane. These were identified as improving operations, but still not achieving the LOS D standards for all approaches, even though the overall intersection satisfied the LOS D standard. For the no-build condition, the addition of these lanes will moderately benefit operations, and will allow the overall intersection to achieve the LOS D standard in the a.m. and p.m. peak hours, but will not allow the overall intersection to achieve LOS D in the Saturday peak with current cycle lengths. However, with an optimized cycle length of 130 seconds, the LOS D standard is also satisfied for the overall intersection on Saturday. It is recognized that signal timing does not constitute mitigation. However, the LOS D standard is achievable in two of the three analysis periods with the existing cycle lengths and phasing, and with the lanes proposed. Without the optimization of cycle length to achieve the LOS D for the Saturday peak, substantial additional mitigation becomes necessary, such as the widening of Buford Drive, or the addition of triple southbound left turn lanes. Recognizing this reality, it is suggested that signal timing optimization is appropriate given the recommended changes in laneage, and would be a reasonable measure to implement before consideration of these significant other widenings.

7. Future (Build) Traffic Analysis

The analysis of the 2019 build scenario identifies the traffic impact of the proposed Destinations DRI. This future condition includes all traffic from the 2019 no-build scenario, plus the traffic that will be added by Destinations.

7.1 Build Lanes and Traffic Control

The no-build infrastructure assumes the following changes are made, based on the No-Build Facilities Needs Analysis:

Intersection 8 – addition of northbound exclusive right turn lane on Mall of Georgia Boulevard at Gravel Springs Road.

Intersection 9 – addition of northbound exclusive right turn lane on Buford Drive at Woodward Crossing Boulevard and westbound protected right turn overlap phase on Woodward Crossing Boulevard.

Intersection 12 – addition of eastbound exclusive right turn lane on Financial Center Way and a southbound exclusive right turn lane on Buford Drive.

In addition, the Mall of Georgia Boulevard proposed main site access will create the fourth leg at the existing unsignalized intersection with Appaloosa Lane. The initial future analysis assumed no changes to the laneage on Mall of Georgia Boulevard. Specifically, the eastbound approach currently has an exclusive left turn lane, striped for U-Turns. This will serve as the left turn lane for Destinations. There is no westbound exclusive right turn lane. Exiting Destinations, it was assumed that two outbound lanes would be provided – a shared left/through lane and a right turn lane. On the northbound approach of Appaloosa Lane, the left turn lane would become a shared left/ through and the right turn lane would continue to be an exclusive right turn lane.

The Woodward Crossing Boulevard site access will be located at an existing median opening. The westbound approach includes an existing exclusive left turn lane which will serve Destinations. There is no eastbound exclusive right turn lane. The northbound approach exiting Destinations was assumed to include two lanes, striped as a left turn lane and a right turn lane. There is a fourth leg at this median break, which is currently undeveloped. Therefore, this intercession was modeled as a T-intersection. This may change in the future, should the land on the north side of Woodward Crossing Boulevard be developed with an access at this median break. The Gwinnett County requirements for left and right turn lanes on Mall of Georgia Boulevard and Woodward Crossing Boulevard are assessed later in this chapter.

7.2 Build Traffic Volumes

The no-build volumes, shown previously in Figures 9 and 10, were combined with the site-generated trips, shown in Figures 4 and 5. This produces the 2019 future build traffic volumes at each study intersection after the Destinations development is fully constructed and operational. These volumes are presented in Figures 11 and 12, and are also shown in the intersection volume worksheets in Appendix C.

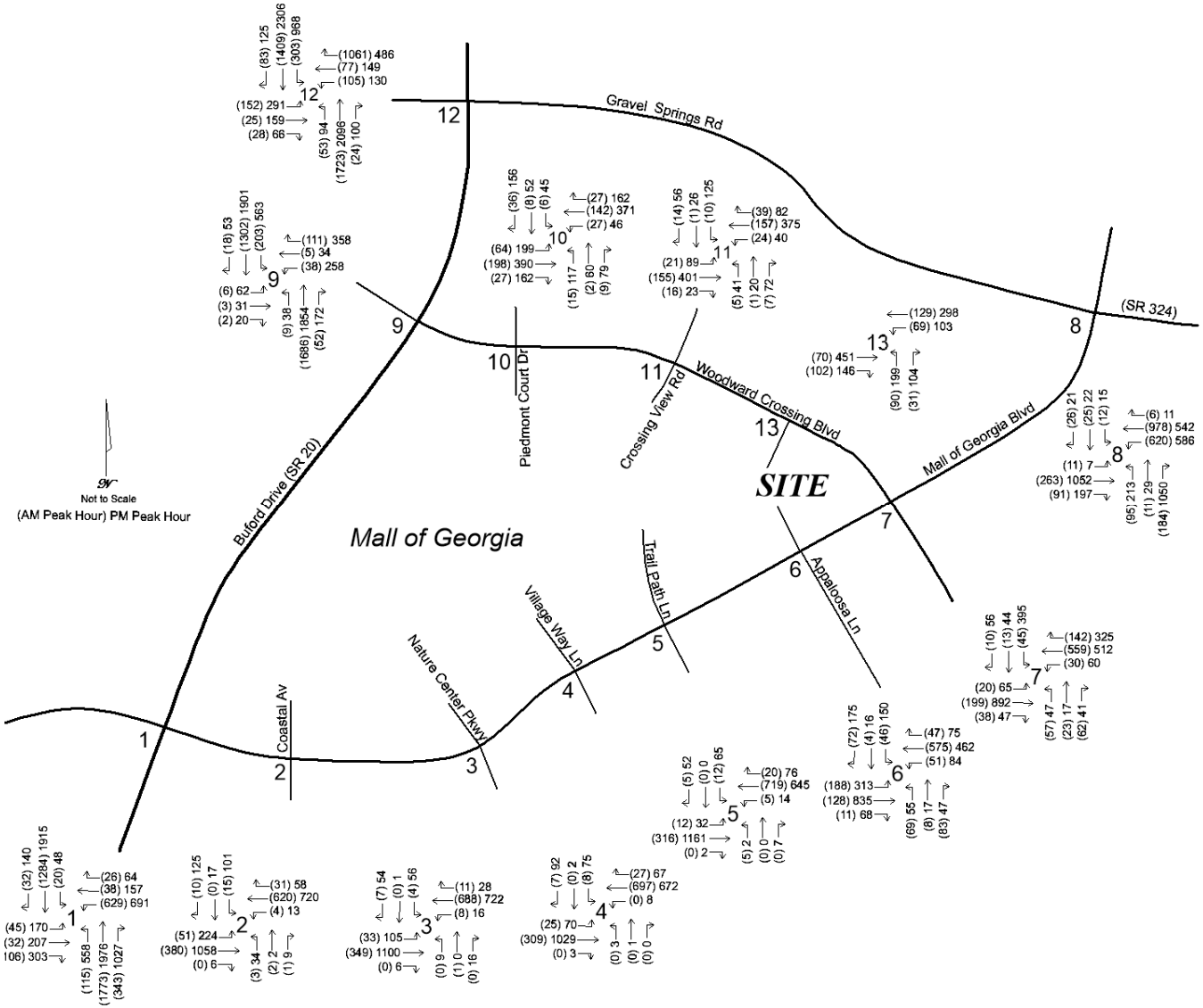

Figure 11 – Future Build Weekday A.M. and P.M. Peak Hour Traffic Volume Projections

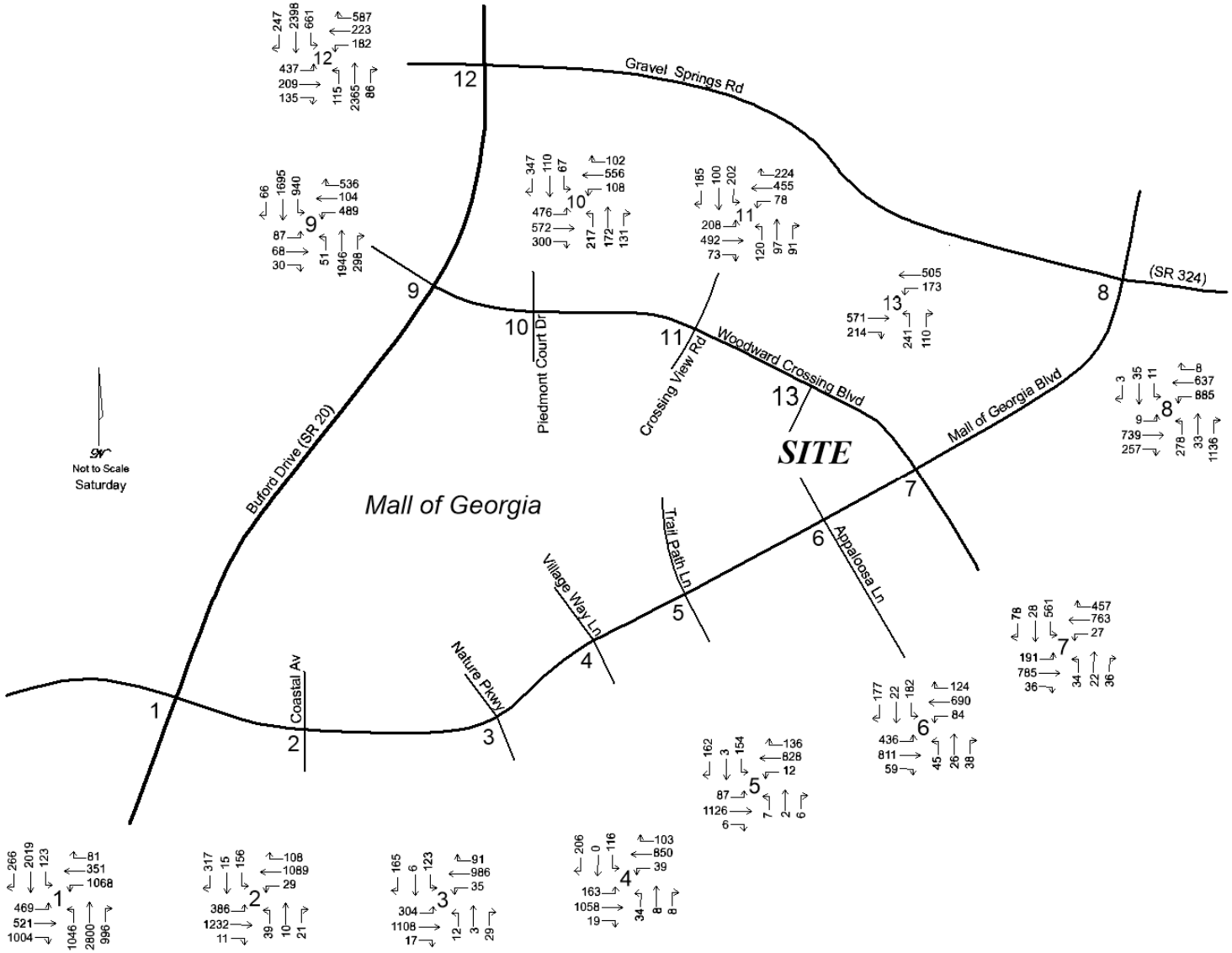

Figure 12 – Future Build Saturday Peak Hour Traffic Volume Projections

7.3 Build Intersection Operations

Each study intersection was re-evaluated for the 2019 build condition. The levels of service at each intersection are shown in Table 8, including the existing and no-build conditions. The Synchro computer printouts are located in Appendix F.

Table 8 – Future Build Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour		Sat. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Buford Drive (SR 20) at Mall of Georgia Blvd	D	40.5	*F*	*82.8*	*F*	*306.7*
northbound approach	C	33.6	D	43.0	*F*	*222.9*
southbound approach	C	26.1	*F*	*86.8*	*F*	*358.1*
eastbound approach	*F*	*102.8*	*F*	*268.7*	*F*	*474.0*
westbound approach	*E*	*74.1*	*F*	*82.4*	*F*	*270.3*
2. Mall of Georgia Boulevard at Coastal Avenue	C	22.4	C	24.0	C	23.1
northbound approach	A	9.4	B	18.6	C	24.5
southbound approach	A	9.7	B	20.0	D	37.2
eastbound approach	B	13.4	B	18.9	A	4.5
westbound approach	C	29.4	C	34.2	D	41.9
3. Mall of Georgia Blvd at Nature Center Pkwy	C	21.6	B	19.2	B	15.9
northbound approach	A	9.7	B	16.3	C	22.6
southbound approach	A	9.8	B	16.9	C	26.7
eastbound approach	C	31.0	B	15.3	A	5.1
westbound approach	B	16.9	C	25.9	C	25.4
4. Mall of Georgia Blvd at Village Way Lane	B	19.3	B	10.4	B	19.8
northbound approach	A	0.0	B	14.2	C	21.9
southbound approach	A	10.0	B	14.0	C	22.3
eastbound approach	C	28.0	A	9.9	C	30.1
westbound approach	B	15.2	B	10.0	A	5.5
5. Mall of Georgia Boulevard at Trail Path Lane	C	21.0	A	7.6	B	19.8
northbound approach	B	11.4	B	15.0	C	21.9
southbound approach	B	11.2	B	15.5	C	22.3
eastbound approach	C	21.1	A	7.8	C	30.1
westbound approach	C	21.3	A	5.9	A	5.5
6. Mall of Georgia Boulevard at Appaloosa Lane	C	20.3	*F*	*NA*	A	2.5
northbound through/left	*F*	*189.2*	*F*	*NA*	*F*	*NA*
northbound right turn	A	9.2	B	12.5	B	12.0
southbound through/left (exiting site)	*F*	*126.0*	*F*	*NA*	*F*	*NA*
southbound right turn (exiting site)	B	13.1	B	14.2	C	21.0

eastbound left turn (entering site)	B	10.3	B	10.3	B	14.4
westbound left turn	A	7.7	B	10.7	B	10.4
7. Mall of Georgia Blvd at Woodward Crossing Blvd	C	30.0	C	29.9	D	44.6
northbound approach	C	29.6	D	37.6	D	39.3
southbound approach	C	34.6	D	38.3	D	42.0
eastbound approach	C	27.7	C	29.3	C	23.6
westbound approach	C	30.3	C	24.7	***E***	***63.3***
8. Gravel Springs Rd at Mall of Georgia Blvd	C	26.9	C	26.9	C	28.2
northbound approach	A	7.3	C	22.5	B	18.4
southbound approach	B	12.4	C	23.2	C	22.3
eastbound approach	D	40.6	C	32.8	D	42.0
westbound approach	C	28.5	C	25.8	C	28.7
9. Buford Drive (SR 20) at Woodward Crossing Blvd	B	16.9	D	35.5	D	52.7
northbound approach	A	7.6	C	25.8	D	48.5
southbound approach	C	20.7	D	35.6	D	49.6
eastbound approach	***F***	***110.2***	***F***	***98.7***	***F***	***134.0***
westbound approach	***E***	***67.2***	D	53.9	D	53.4
10. Woodward Crossing Blvd at Piedmont Court Dr	C	31.8	C	24.2	C	28.8
northbound approach	A	4.1	B	10.7	C	32.8
southbound approach	A	4.0	A	9.7	C	21.0
eastbound approach	D	36.3	C	26.8	C	23.1
westbound approach	D	38.5	C	34.2	D	42.4
11. Woodward Crossing Blvd at Crossing View Rd	D	35.1	C	25.5	C	24.0
northbound approach	A	3.5	A	8.0	B	11.8
southbound approach	A	3.5	A	8.6	B	13.0
eastbound approach	D	39.0	C	30.3	C	27.7
westbound approach	D	37.0	C	32.1	C	33.0
12. Buford Dr (SR 20) at Gravel Springs Rd (SR 324)	***E***	***57.1***	***E***	***55.8***	***E***	***65.5***
northbound approach	***E***	***56.5***	***E***	***66.2***	***E***	***73.8***
southbound approach	D	50.9	D	40.5	D	49.0
eastbound approach	***F***	***113.4***	***F***	***111.3***	***F***	***104.6***
westbound approach	***E***	***57.2***	***E***	***57.2***	***E***	***68.5***
13. Woodward Crossing Blvd at Destinations	A	3.9	C	20.8	***E***	***37.6***
northbound left turn (exiting site)	B	13.1	***F***	***134.7***	***F***	***317.2***
northbound right turn (exiting site)	A	9.2	B	12.2	B	12.6
westbound left turn (entering site)	A	7.9	A	9.7	B	10.3

7.4 Build Facilities Needs Analysis

The build analysis reveals that several locations will not meet the LOS D standard. As with the existing and no-build analyses, Intersection 1, Buford Drive at Mall of Georgia Boulevard will operate at LOS F even with substantial mitigation, including the widening of Buford Drive. Since the LOS D standard cannot be achieved with this extensive mitigation, no additional mitigation is evaluated here. The analysis of build condition reveals that the following locations do not meet the LOS D standard:

6. Mall of Georgia Boulevard at Appaloosa Lane / Destinations Access – overall intersection: p.m., northbound and southbound through/lefts: all time periods
7. Mall of Georgia Boulevard at Woodward Crossing Boulevard – westbound approach: Saturday
9. Buford Drive at Woodward Crossing Boulevard – eastbound approach: all time periods, westbound approach: a.m.
12. Buford Drive at Gravel Springs Road – overall intersection: all time periods, northbound, eastbound, westbound approaches: all time periods
13. Woodward Crossing Boulevard at Destinations Access – overall intersection: Saturday, northbound left turn: p.m., Saturday

Intersection 6 – Mall of Georgia Boulevard at Appaloosa Lane / Destinations Access

As discussed in the existing and no-build conditions, the side street left turns experience/will experience high delays. This is not uncommon on stop sign controlled side street approaches at busy thoroughfares such as Mall of Georgia Boulevard. With the addition of the Destinations access as the fourth approach, and the Destinations traffic, this intersection will become a good candidate for signalization. A signal warrant analysis should be performed at this intersection based on the MUTCD to determine if this intersection meets the criteria for signalization. It should be recognized that a signal would introduce new delays to the through traffic on Mall of Georgia Boulevard. Should the intersection remain unsignalized, the southbound approach exiting Destinations at Mall of Georgia Boulevard should be striped with a shared left/through lane and an exclusive right turn lane. This approach should be controlled by a stop sign and accompanying stop bar. The northbound approach on Appaloosa Lane should add a through arrow to the existing left turn lane, to accommodate trips from Appaloosa Lane into Destinations. Should signalization be pursued and justified, the signal warrant study will specify the appropriate lane configuration and signal phasing. The need for left and right turn lanes on Mall of Georgia Boulevard, to serve Destinations, is discussed in the Destinations Site Access Analysis section of this report.

Intersection 7 – Mall of Georgia Boulevard at Woodward Crossing Boulevard

This intersection will operate well in the future, with only one approach (westbound) operating at LOS E during one peak time period. The lane geometry that exists at this location is appropriate for the future volumes and, therefore, no additional lanes are recommended to address this one approach LOS E. It is advised that the signal timing be reviewed and updated in the future as traffic volumes and patterns change over time.

Intersection 9 – Buford Drive at Woodward Crossing Boulevard

This intersection will generally operate well in the build condition, but the eastbound approach will continue to operate at LOS F at all times and the westbound approach will operate at LOS E in the a.m. Since the geometry at this intersection is somewhat maxed-out, no additional lanes are recommended to correct this. As discussed in the no-build analysis, certain approach level of service will continue to experience high delays simply due to the optimal allocation of greentime, favoring the high volume approaches and movements and, conversely, providing insufficient greentime for the lower-volume movements. Allocating additional greentime to the eastbound approach, will increase delays on the other, busier approaches. Additional widening of Buford Drive would reduce the greentime requirements on this signal for the highest volume approaches. This major project, which would also have benefits at Intersections 1 and 12, may merit consideration by the Georgia DOT.

Intersection 12 – Buford Drive at Gravel Springs Road

The no-build analysis suggested that fine-tuning of the signal timing could achieve the LOS D standard for the overall intersection. This continues to be true in the future for the a.m. and p.m. time periods, with no additional lanes. The overall intersection would drop to LOS E in the Saturday peak and certain approaches would not meet the LOS D standard in each time period. As with the no-build condition, without the optimization of the cycle length to achieve the LOS D, substantial additional mitigation becomes necessary, such as the widening of Buford Drive, or the addition of triple southbound left turn lanes. Recognizing this reality, as with the no-build condition, it is suggested that signal timing optimization would be a reasonable measure to implement before consideration of these significant other widenings.

Intersection 13 – Woodward Crossing Boulevard at Destinations Access

The Destinations access on Woodward Crossing Boulevard will operate acceptably overall, but the northbound exiting left turn will operate at LOS F. As with the site access and Appaloosa Lane approaches on Mall of Georgia Boulevard, this is not unusual on side street stop sign controlled approaches at busy thoroughfares such as Woodward Crossing Boulevard. Signalization would improve the level of service for the left turners, but, it must be recognized that a signal would introduce new delays to the through traffic on Woodward Crossing Boulevard. A signal warrant study should be performed according to MUTCD standards to determine if a signal is justified at this location. This analysis should weigh the benefits to the Destinations exiting left turn lane with the costs that will be incurred in the form of delays to the traffic on the main street. With signalization, this intersection would operate at LOS B, with the northbound, exiting approach operating at LOS C during the Saturday peak (the time of highest delay).

Should Intersection 13 remain unsignalized, the northbound approach exiting Destinations at Woodward Crossing Boulevard should be striped with an exclusive left turn lane and an exclusive right turn lane. This approach should be controlled by a stop sign and accompanying stop bar. Should signalization be pursued and justified, the signal warrant study will specify the appropriate lane configuration and signal phasing, which may take into consideration the potential for development on the fourth approach, opposing the Destinations

access. The need for left and right turn lanes on Woodward Crossing Boulevard, to serve Destinations, is discussed in the Destinations Site Access Analysis section of this report.

Other Network Intersections

Operations will remain similar to the existing and no-build conditions at the Mall of Georgia Boulevard intersections at Coastal Avenue, Nature Center Parkway, Village Way Lane, and Trail Path Lane. Some delays and levels of service actually improve slightly in the future build condition. This is attributable to additional vehicles being added to movements that had a surplus of greentime in the no-build condition. The additional vehicles that are processed by the intersection, with no increases in delays, reduce the average delay per vehicle. These are generally relatively small changes. No additional improvements are recommended at these intersections. Likewise, operations at the intersections of Woodward Crossing Boulevard at Piedmont Court Drive and at Crossing View Road will remain comparable between the no-build and build conditions. No additional recommendations are made for these two intersections.

7.5 Destinations Site Access Analysis

An analysis was performed for all Destinations site accesses. Figure 13 shows the site access volumes for the Build condition for all peak hours. The operations at the two main, full movement site accesses (Intersections 6 and 13) were reported previously in Table 8. The other three site accesses are located along sections of Mall of Georgia Boulevard (two accesses) and Woodward Crossing Boulevard (one access) that are median divided. Therefore, these three accesses will operate with right-in / right out (RIRO) operations only. An operational analysis was performed for the three RIRO accesses – Intersections A, B, and C. The results of this analysis are shown in Table 9.

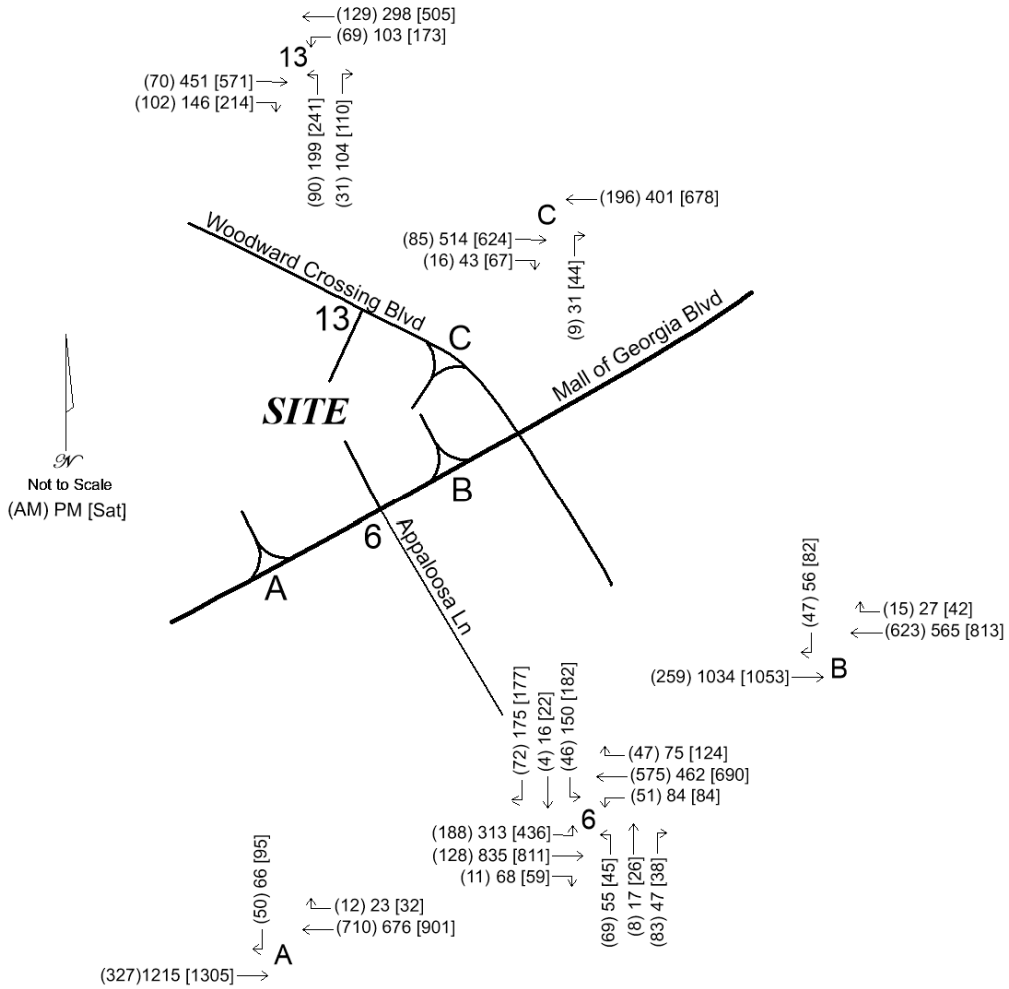

Figure 13 – Future Build Peak Hour Traffic Volume Projections at All Site Accesses

Table 9 – RIRO Site Access Intersection Operations*

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour		Sat. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
A. Site Access A at Mall of Georgia Blvd	A	0.6	A	0.5	A	0.7
southbound right turn (exiting site)	B	11.9	B	11.7	B	13.4
B. Site Access B at Mall of Georgia Blvd	A	0.6	A	0.5	A	0.6
southbound right turn (exiting site)	B	11.3	B	10.9	B	12.5
C. Site Access C at Woodward Crossing Blvd	A	0.4	A	0.5	A	0.4
northbound right turn (exiting site)	A	8.7	B	10.6	B	10.9

*The operations at the full-movement site accesses, Intersections 6 and 13, were reported previously in Table 8.

The analysis of the three RIRO site accesses reveals that all three locations entering and exiting the site will operate well, with minimal delays. It is recommended that each RIRO access be constructed with one entering and one exiting lane and the exiting approach be controlled by side street stop sign and stop bar.

7.6 Gwinnett County Auxiliary Lane and Sight Distance Assessment at Site Accesses

The Gwinnett County requirements for auxiliary turn lanes at private driveways were reviewed for all Destinations site accesses. These include left and right turn lane standards at the two full-movement accesses, and the right turn lane standards at the three RIRO accesses.

7.6.1 Right Turn Lanes

For the right turn lanes, the Gwinnett County Unified Development Ordinance (UDO) was applied, as follows: Section 900-30.2 Project Access Improvements for Multifamily and Non-residential Developments. Part B: "A deceleration lane shall be required to be provided at each project driveway or subdivision street entrance, as applicable, that is provided street access to a Minor Collector Street or Major Thoroughfare." And Part C: "Deceleration lanes shall have a length of 200 feet, with an additional 50 foot taper length, pavement width of 12 feet (exclusive of curb and gutter), and shall be provided with curb and gutter. Additional right-of-way to accommodate the deceleration lane and an 11 foot shoulder shall be dedicated by the developer to Gwinnett County at no cost. Associated drainage improvements as deemed necessary by the construction of the deceleration lane shall also be required."

Based on the UDO, a deceleration lane should be provided at all five site accesses. Each should provide 200 feet of full-width (12 feet) storage length and an additional 50 foot taper. The distances between the driveways may necessitate slight reductions in the storage lengths at some of these locations.

7.6.2 Left Turn Lanes

A left turn lane is already provided for eastbound left turns entering Destinations from Mall of Georgia Boulevard at Intersection 6 and for westbound left turners entering Destinations from Woodward Crossing Boulevard at Intersection 13. For the left turn lanes at the two full movement accesses, the Gwinnett County DOT *Criteria and Guidelines for Left Turn Lanes* specifies that, for unsignalized intersections the storage lane length shall, typically, be based on the number of design vehicles arriving during a two minute period within the peak hour.

At Intersection 6, during the highest peak hour, on Saturday, there will be 436 left turn vehicles. If evenly distributed through an hour, this volume would equate to 15 vehicles arriving in an average two minute period. At 25 feet per vehicle (the passenger car standard, which will be essentially all entering vehicles during a Saturday afternoon peak), this would require 375 feet of full width storage, plus taper. Should the intersection be signalized, this storage requirement may change. The existing lane provides approximately 200 feet of storage. There is additional length in the median, before reaching the bridge over Ivy Creek, in which additional

storage length for the left turn lane could be provided. The left turn lane storage should be increased to a minimum of 375 feet, or as feasible based on the proximity of the bridge. The current U-Turn arrows should be replaced with standard left turn arrows.

At Intersection 13 the existing left turn lane provides approximately 200 feet of full-width storage plus a taper. During the busiest time, the Saturday peak, this left turn volume is projected at 173 vehicles. If evenly distributed through an hour, this would equate to 6 left turning vehicles in a typical two minute interval. At 25 feet per vehicle, 150 feet of storage would be required. Since the existing lane already exceeds this capacity, the existing 200 feet of storage is expected to be sufficient.

7.6.3 Intersection Sight Distance

The County intersection sight distance standard was evaluated for the five site accesses.

At the full movement access on Mall of Georgia Boulevard, the County intersection sight distance standard for a speed of 45 mph on a five lane cross section (four through travel lanes plus the width of the opposing left turn lanes) is 530 feet to the left and 600 feet to the right. Sight distance is generally clear in both directions along Mall of Georgia Boulevard from the proposed Destinations access location on Mall of Georgia Boulevard. However, there are trees planted in a row along Mall of Georgia Boulevard that may impede line of sight. Since the access does not currently exist, it is advised that the design of the access should be such that sufficient intersection sight distance is provided. Removal of some of the trees and other vegetation may be required. At the two RIRO accesses (Intersections A and B) on Mall of Georgia Boulevard, the sight distance to the right is not applicable since no oncoming vehicles will approach from that direction due to the presence of the median. The County sight distance standard to the left of 530 feet should be provided at each RIRO access. As with the full movement access, removal of some vegetation may be required to achieve this distance, once the accesses are constructed.

At the proposed full movement site access location on Woodward Crossing Boulevard (Intersection 13), the County sight distance standards were assessed against field conditions. As stated above, the minimum sight distance standard is taken to be 530 feet to the left and 600 feet to the right, based on a speed of 45 mph and a five lane cross section. To the left, a row of planted trees and a light pole are in the sight triangle. Sight distance to the right was measured at approximately 360 feet. The curvature of Woodward Crossing Boulevard and the presence of some planted vegetation in the median, and a row of planted trees along the subject property frontage, are the limiting factors in this direction. The final design of the Destinations access approach may change the location of the driver's eye, which may affect the actual available sight distance in each direction. As with the Mall of Georgia Boulevard access, it is advised that the design of the access should be such that it ensures that sufficient intersection sight distance is provided. This may necessitate the removal of some of the planted trees, poles, and other vegetation. The RIRO site access on Woodward Crossing Boulevard (Intersection C) should be designed to ensure that the County standard to the left of 530 feet, is satisfied. As with Intersection 13, this may require removal of some trees and poles.

The project site engineer is advised to ensure that the design of the site driveways and all site internal streets comply with all applicable design standards, including the Gwinnett County Unified Development Ordinance.

8. Summary of Recommended Mitigation

Table 10 presents a summary of the mitigation recommended in this study. These improvements are presented graphically in Figure 14. It is noted here that this report presents other improvements that are not part of the mitigation required to achieve LOS goals, such as refreshing striping or providing missing signage. These are not included in Table 10 or Figure 14.

Table 10 – Summary of Mitigation

Analysis Condition	Recommended Mitigation
Existing	Intersection 1 – Buford Drive at Mall of Georgia Boulevard: Add a second eastbound exclusive right turn lane and accompanying right turn overlap phase on Mall of Georgia Boulevard.
	Intersection 6 – Mall of Georgia at Appaloosa Lane: Perform a signal warrant study according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices*.
	Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard: Add a northbound right turn overlap phase, to run concurrently with the westbound protected left turn phase.
No-Build	Intersection 8 – Gravel Springs Road at Mall of Georgia Boulevard: Add a second northbound exclusive right turn lane, in addition to the protected right turn overlap phase previously recommended for this movement.
	Intersection 9 – Buford Drive at Woodward Crossing Boulevard: Add a northbound exclusive right turn lane on Buford Drive at Woodward Crossing Boulevard. Add a westbound right turn channelizing island on Woodward Crossing Boulevard and accompanying protected right turn lane overlap phasing.
	Intersection 12 – Buford Drive at Gravel Springs Road: Add an eastbound right turn lane on Financial Center Way and a southbound right turn lane on Buford Drive. Signal timing should be optimized for the recommended changes in laneage.
Future	Intersection 6 – Mall of Georgia Boulevard at Appaloosa Lane / Destinations Access: As identified in the existing analysis, a signal warrant analysis should be performed at this intersection based on the MUTCD to determine if this intersection meets the criteria for signalization.
	Intersection 13 – Woodward Crossing Boulevard at Destinations Access: A signal warrant study should be performed according to MUTCD standards to determine if a signal is justified at this location.

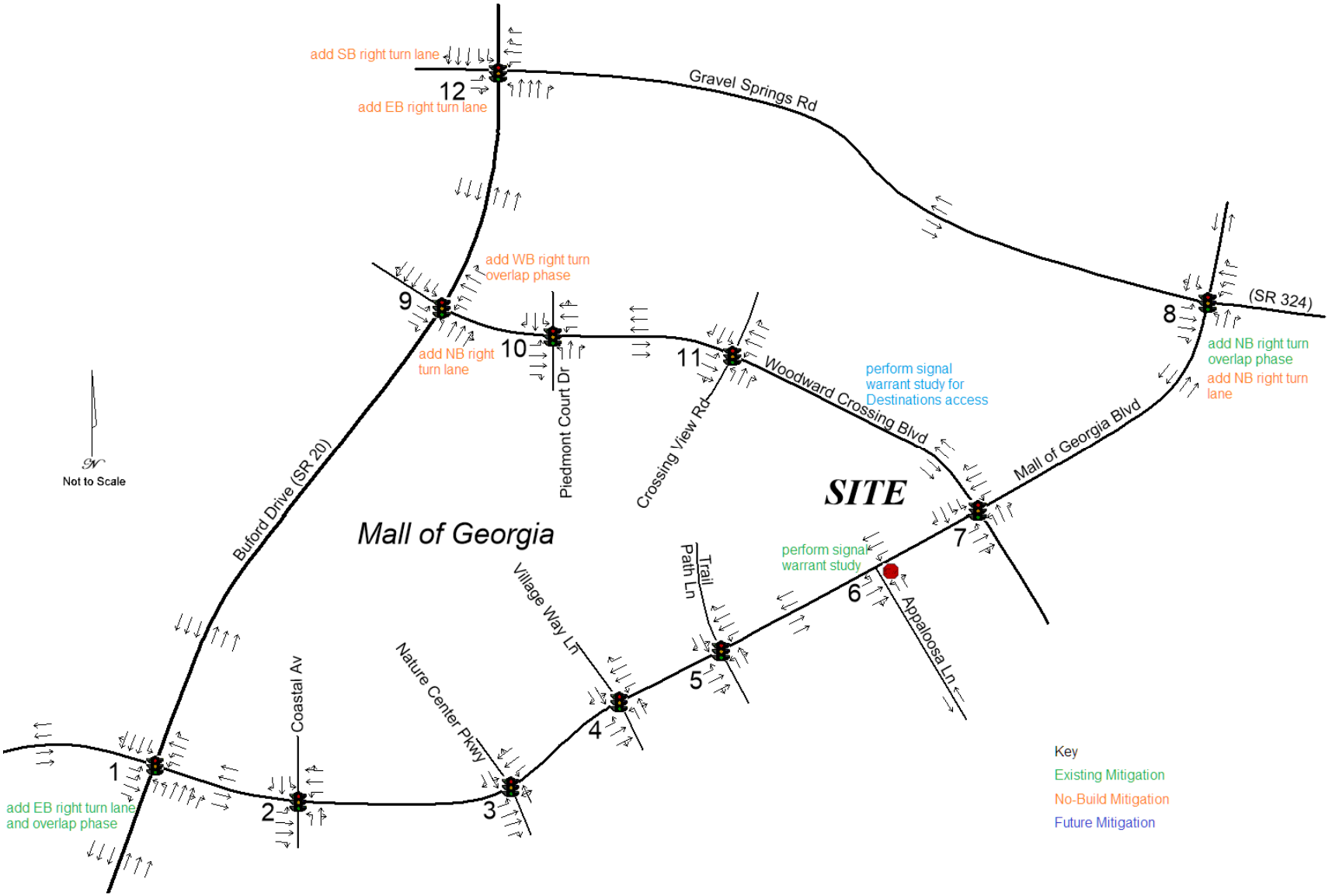

Figure 14 – Summary of Mitigation

9. Site Internal Circulation and Connectivity

The Destinations DRI will be served by two primary, full-movement accesses, one to Mall of Georgia Boulevard and one to Woodward Crossing Boulevard. In addition, three minor right-in / right-out accesses will also be provided. The Mall of Georgia Boulevard full-movement access aligns with existing Appaloosa Lane and the Woodward Crossing Boulevard access aligns with an existing stub that may become an access to property on the north side of the road, when it is ultimately developed. An internal roadway runs north/south through the site, connecting the Mall of Georgia access with the Woodward Crossing access and an east-west roadway runs through the site, intersecting with the north/south roadway and creating a minor grid of streets within the limited area of the site. The parking garages are each provided with multiple accesses to different internal roadways, providing connectivity and options for motorists. Internal circulation is somewhat limited by the small area of the site, but the semi-grid roadway design allows for flexibility and good circulation between the various portions of the development.

Sidewalks will be provided along both sides of all internal streets. These will connect to the existing sidewalks along the frontages on Mall of Georgia Boulevard and Woodward Crossing Boulevard. In order to facilitate pedestrian access to the Mall of Georgia, a pedestrian bridge is proposed from the center of the Destinations project, over Ivy Creek, to close proximity of the eastern end of the Mall building. Should the main site accesses be signalized, pedestrian crosswalks and signals would be recommended at these locations.

No bicycle lanes exist in the study area and none are proposed within the Destinations site. However, due to the mix of land uses in the area, and in order to encourage and facilitate this mode of travel, bicycle racks should be installed at the entrances to the retail shopping, family entertainment center, and near the offices and hotel.

The site plan does not include vehicular connectivity to the Mall of Georgia property, which is the adjacent property to the west. A direct vehicular connection between the properties would reduce vehicle trips between the two properties which would otherwise need to travel on Mall of Georgia Boulevard and Woodward Crossing Boulevard. However, adding vehicular capability to the Ivy Creek bridge would change the character of the user experience, and, in any case, should not come at the expense of the pedestrian facility – if the bridge is built, it should include sidewalks on both sides, whether or not vehicular access is provided on the bridge.

10. Programmed Infrastructure Projects

Programmed transportation infrastructure projects in the vicinity of the Destinations site were researched. Project data was obtained from the Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP). Five projects were identified in the vicinity. These projects are listed in Table 11 with the detailed project sheets located in Appendix G.

Table 11 – Programmed Transportation Infrastructure Projects

Project	Description	Network Year
AR-ML-410	I-85 North Managed Lanes – includes a new managed lane in each direction on I-85 from Old Peachtree Road to Hamilton Mill Road	2020
GW-020D	SR 20 widening from 4 to 8 lanes from I-85 to Rock Springs Road	2030
GW-308B	Sugarloaf Parkway Extension – new connector from SR 316 east of Lawrenceville to I-85	2040
GW-308C	Sugarloaf Parkway Extension – new connector from I-85 to Peachtree Industrial. This road will cross Mall of Georgia Blvd just east of Woodward Crossing Blvd and will significantly impact traffic in the vicinity of the Destinations development.	2040
GW-388	New Full Diamond Interchange, SR 324 at I-85	2024

AR-ML-410 has the closest year of implementation and will impact the efficiency and operations on I-85. However, the project will be completed after the future build analysis and these lanes are not anticipated to directly impact the operations at the intersections included in this traffic impact study.

GW-020D will not directly change the design or capacity of any study intersection, though this widening, when completed, could deliver more trips to the study area. However, this project is scheduled substantially after the build-out date of the Destinations development and is, therefore, not included in the 2019 analysis.

GW-308 B and C will directly impact traffic operations in the vicinity of the Destinations development. However, the project is not anticipated to be completed until 2040 and was not included in the 2019 analysis.

Likewise, GW-388 calls for the construction of a new full-diamond interchange on Gravel Springs Road at I-85. This new interchange has the potential to change travel patterns and volumes in the study area and will provide a more direct route from the Destinations site to I-85. This project is currently anticipated to be completed in 2024, and Gwinnett County officials indicated that, even if completed before this network year, it is unlikely to be operational before 2020. Therefore, this interchange was not included in the 2019 analysis.

11. Compliance with GRTA Criteria

This section addresses the compliance of Destinations DRI #2574 with the five criteria presented in Section 3-101 – General Criteria Applicable to All Proposed DRIs, and the three criteria presented in Section 3-103 – Criteria for GRTA DRI Non-Expedited Review, both found in *Procedures and Principles for GRTA Development of Regional Impact Review*, effective February 13, 2013.

11.1 General Criteria Applicable to All Proposed DRIs

A. Accessibility – The proposed DRI is designed to provide safe, quality, and convenient access and provides the flexibility of non-vehicular transportation options from the proposed development to existing or planned pedestrian, bicycle, or transit facilities such that there is a likelihood of significant use by residents, employees, and visitors to the proposed DRI.

The Destinations DRI will be served by two primary and three minor vehicular accesses. Sidewalks will connect to existing sidewalks and a pedestrian bridge will connect the development to the Mall of Georgia. There are no bicycle lanes or transit immediately adjacent to the site, but bicycle racks will be provided at appropriate locations throughout the project. The site design allows for multiple options for efficient and flexible accessibility for vehicles and pedestrians.

B. Connectivity – The proposed DRI is likely to promote improved regional mobility in terms of new vehicular connections, on-site vehicular movements, and alternate routes that are likely to operate in a safe and efficient manner, increase the public roadway network, and avoid delays during peak periods.

The primary site access on Mall of Georgia Boulevard will align with existing Appaloosa Lane and the Woodward Crossing Boulevard access will align with a stub that will ultimately serve future development. Therefore, vehicular connectivity with adjacent land uses is good. A pedestrian bridge will cross Ivy Creek, providing direct pedestrian connectivity with the Mall of Georgia.

C. Access Management – The proposed DRI is designed so that vehicular ingress and egress to any on-site parking facilities and all access points to adjacent public roads are likely to operate in a safe and efficient manner and are not reasonably anticipated to result in peak hour ingress and egress congestion on adjacent roads and at nearby intersections, referred to as an Access Analysis.

The site is designed with multiple accesses which are connected to the various parking garages throughout the site. This will allow for efficient motorist choice of appropriate access. The analysis of all site accesses reveal that acceptable operations will either occur, or be achievable, at all site accesses. Delays at the two full-movement accesses may be mitigated by signalization at those locations. Lines of sight at all accesses should be clear in order to ensure safe access. This is achievable at all locations, but may require removal of some vegetation.

D. Regional Policies and Adopted Plans – The proposed DRI is likely to promote improved regional mobility because it is located in a center or corridor identified in the Regional Development Plan (RDP) designated by an RC; or the DRI has included in the proposed site plan components which will assist in the implementation of a transportation project currently in the Regional Transportation Plan (RTP) or Transportation Improvement Program (TIP), or other adopted regional plan designated by an RC.

The Destinations DRI is compatible with land use plans for this area of Gwinnett County. While the project does not specifically assist in the implementation of any planned transportation project, it does not preclude any such improvements or plans.

E. Local Standards Supporting Regional Policies – The proposed DRI is located within a local jurisdiction, or other jurisdictional agencies, with adopted codes that support regionally adopted policies, or the development codes and standards do not prohibit or impede the proposed DRI from meeting the GRTA DRI review criteria stated in Sections 3-101, 3-102, and 3-103.

Destinations is located in unincorporated Gwinnett County. Gwinnett County controls land development patterns and uses through a comprehensive code of zoning ordinances, a comprehensive land use plan, and a transportation plan. No applicable code or standard of Gwinnett County has been identified through this transportation study that would impede or prohibit the Destinations DRI from meeting regional goals.

11.2 Criteria for GRTA DRI Non-Expedited Review

1. Vehicle Miles of Travel – The proposed DRI is likely to promote improved regional mobility and regional air quality by reducing vehicle miles of travel, and is designed to encourage the use of alternative transportation modes, or is located within an area with, or is proposing, a mixture of complimentary land uses. Offsite trip generation from the proposed DRI is reduced by at least fifteen percent (15%), or, in the event that a proposed DRI is unable to satisfy the trip reduction standard established in this subsection because of conditions which are beyond the control of the developer or the affected local government, the proposed DRI implements all available trip reduction techniques which are reasonably practical.

The project will be developed with a mix of land uses, a semi-grid of streets interconnecting the uses, and sidewalks with pedestrian-friendly character. The mix of uses will reduce vehicle miles of travel by eliminating trips between compatible uses, when compared with similar levels of development built separately. The trip generation analysis reveals that the multi-use character of the project will eliminate 3,390 daily trips from the raw projection of 20,712. This represents a greater than 16% reduction in daily trips generated by this project, satisfying this Vehicle Miles of Travel standard.

The site plan includes direct vehicular connectivity to adjacent properties to the north and south, through alignment of its accesses with existing Appaloosa Lane and an existing stub which will provide access to the property to the north. This will minimize impacts of the project caused by trips between Destinations and these adjacent uses. The pedestrian bridge across Ivy Creek will reduce vehicle miles of travel between the site and the Mall of Georgia. Finally, this project will intercept trips that are already being made in the area, such as to

grocery stores or other retail shopping, by providing these amenities closer to their trip origins. This will also serve to reduce vehicle miles of travel in the study area. Additionally, some residents of the surrounding areas may be employed at the site, which would reduce existing trips from this general area to other employment centers.

2. Transportation and Traffic Analysis – The proposed DRI is reasonably anticipated to comply with planned or programmed improvements, maintain performance measures for preserving regional mobility, provide safe and efficient operations, and minimizes congestion when the proposed development or phase of development is complete. The quality of the proposed and existing infrastructure in the transportation network operates in a safe manner and adequately serves new trips generated by the proposed DRI in the build-out year. The proposed DRI identifies impacts on existing or programmed infrastructure, and proposes mitigation that is feasible and within the control of the applicant or appropriate agencies to implement.

The proposed DRI does not conflict with, or preclude, any planned or programmed improvements. This Transportation Analysis identifies locations where regional mobility is challenged, particularly on Buford Drive (SR 20). However, these challenges exist today and while levels of service do not meet the LOS D goal, improvements have been identified in this analysis to mitigate some of the existing congestion such that, with the addition of the proposed DRI, future levels of service in that corridor will be somewhat comparable to existing. This study identifies mitigation that will allow the infrastructure in the study network to operate in a safe manner. The mitigation identified in this report is feasible and within the control of the applicant or appropriate agencies. It is noted that the LOS D goal was not achievable at some locations along SR 20. Ultimately, the widening of SR 20 might be considered by Georgia DOT in order to achieve regional mobility goals. The feasibility of this major corridor widening is beyond the scope of this Transportation Study.

3. Relationship to Existing Development and Infrastructure – The proposed DRI is not located in any area where the existing level of development and availability of infrastructure is such that the proposed DRI is reasonably anticipated to result in unplanned and poorly served development which would not otherwise occur until well-planned growth and development and adequate public facilities are available.

The Destinations DRI represents well-planned growth and development, and provides connectivity to adjacent existing development and potential future development. This DRI does not preclude any well-planned development or infrastructure potential.

Appendix A
Traffic Analysis Methodologies

Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of control delay per vehicle. For signalized intersections, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections are shown in Table A.

Table A – Level of Service Criteria for Signalized Intersections

Control Delay (s/veh)	Level of Service by Volume-to-Capacity Ratio	
	≤1.0	>1.0
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

Source: Highway Capacity Manual 2010

Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an

unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory, factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

Table B – Level of Service Criteria for Unsignalized Intersections

Control Delay (s/veh)	Level of Service by Volume-to-Capacity Ratio	
	≤1.0	>1.0
0 – 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

Source: Highway Capacity Manual 2010

Facilities Needs Analysis

A facilities needs analysis tests alternative combinations of roadway improvements that allow a facility to achieve the LOS D standard (see Level of Service Standards section of the Study Network Chapter). Facilities needs analyses are performed for the existing, no-build, and build conditions, where necessary. The existing facilities needs analysis identifies existing deficiencies, and the mitigation required to achieve the applicable LOS standard. The future no-build analysis allows for the identification of projects necessary to bring the roadways up to the proscribed LOS standard, after the inclusion of other planned levels of development, but before the introduction of project-generated traffic. The future build analysis identifies those additional facilities improvements that will be necessitated by the subject DRI. Later in the study, programmed transportation improvements are identified, and those improvements are compared with the results of the facilities needs analysis, where appropriate.

Appendix B
Traffic Count Data

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TMC Data
Buford Dr (SR20) @ Mall of GA Blvd

7-9am I 4.30-6.30pm

File Name : 38080001
Site Code : 38080001
Start Date : 3/22/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	13	329	22	0	364	2	289	1	0	292	3	1	19	0	23	102	2	9	0	113	792
07:15 AM	21	390	24	0	435	3	280	5	0	288	12	2	27	0	41	123	9	4	0	136	900
07:30 AM	20	405	39	0	464	2	317	8	0	327	7	5	19	0	31	124	4	9	0	137	959
07:45 AM	39	408	61	0	508	7	268	7	0	282	10	2	26	0	38	116	5	6	0	127	955
Total	93	1532	146	0	1771	14	1154	21	0	1189	32	10	91	0	133	465	20	28	0	513	3606
08:00 AM	22	373	45	0	440	6	276	8	0	290	11	6	22	0	39	89	3	4	0	96	865
08:15 AM	39	341	41	0	421	3	271	10	0	284	7	4	25	0	36	124	2	8	0	134	875
08:30 AM	47	365	57	0	469	3	256	5	0	264	9	3	34	0	46	113	8	8	0	129	908
08:45 AM	42	407	53	0	502	7	297	14	0	318	10	7	25	0	42	77	6	8	0	91	953
Total	150	1486	196	0	1832	19	1100	37	0	1156	37	20	106	0	163	403	19	28	0	450	3601
*** BREAK ***																					
04:30 PM	97	435	187	0	719	14	432	22	0	468	45	41	75	0	161	95	29	18	0	142	1490
04:45 PM	106	414	172	0	692	13	399	35	0	447	47	39	80	0	166	79	25	15	0	119	1424
Total	203	849	359	0	1411	27	831	57	0	915	92	80	155	0	327	174	54	33	0	261	2914
05:00 PM	117	444	187	0	748	11	449	29	0	489	30	33	77	0	140	118	25	17	0	160	1537
05:15 PM	121	451	189	0	761	9	442	23	0	474	47	39	59	0	145	99	31	14	0	144	1524
05:30 PM	109	409	186	0	704	13	419	23	0	455	40	46	81	0	167	96	28	19	0	143	1469
05:45 PM	149	452	181	0	782	10	392	49	0	451	34	45	52	0	131	109	34	7	0	150	1514
Total	496	1756	743	0	2995	43	1702	124	0	1869	151	163	269	0	583	422	118	57	0	597	6044
06:00 PM	101	447	167	0	715	8	460	31	0	499	35	31	75	0	141	118	35	16	0	169	1524
06:15 PM	120	382	148	0	650	11	428	43	0	482	44	51	104	0	199	104	21	28	0	153	1484
Grand Total	1163	6452	1759	0	9374	122	5675	313	0	6110	391	355	800	0	1546	1686	267	190	0	2143	19173
Apprch %	12.4	68.8	18.8	0		2	92.9	5.1	0		25.3	23	51.7	0		78.7	12.5	8.9	0		
Total %	6.1	33.7	9.2	0	48.9	0.6	29.6	1.6	0	31.9	2	1.9	4.2	0	8.1	8.8	1.4	1	0	11.2	

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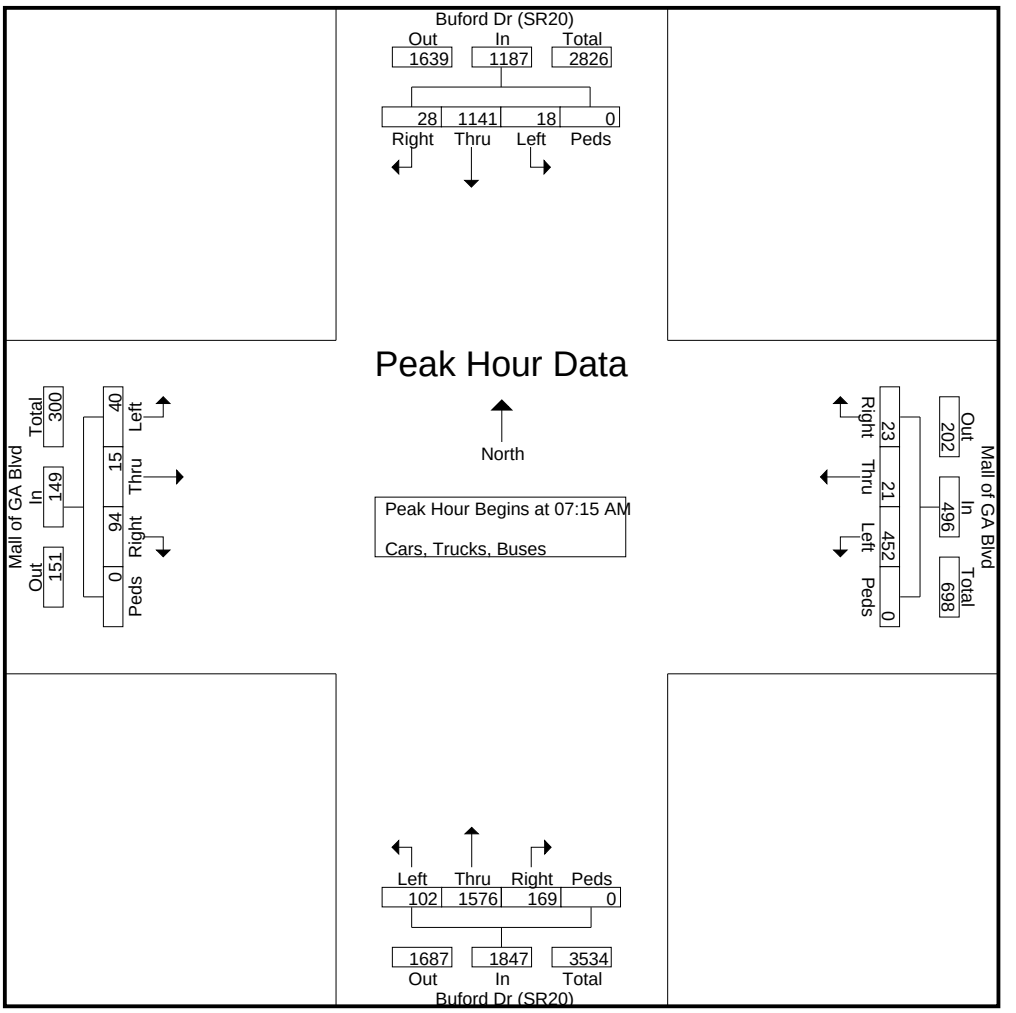
TMC Data
Buford Dr (SR20) @ Mall of GA Blvd

7-9am I 4.30-6.30pm

File Name : 38080001
Site Code : 38080001
Start Date : 3/22/2016
Page No : 2

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:15 AM																					
07:15 AM	21	390	24	0	435	3	280	5	0	288	**12**	2	**27**	0	**41**	123	**9**	4	0	136	900
07:30 AM	20	405	39	0	464	2	**317**	**8**	0	**327**	7	5	19	0	31	**124**	4	**9**	0	**137**	**959**
07:45 AM	**39**	**408**	**61**	0	**508**	**7**	268	7	0	282	10	2	26	0	38	116	5	6	0	127	955
08:00 AM	22	373	45	0	440	6	276	8	0	290	11	**6**	22	0	39	89	3	4	0	96	865
Total Volume	102	1576	169	0	1847	18	1141	28	0	1187	40	15	94	0	149	452	21	23	0	496	3679
% App. Total	5.5	85.3	9.1	0		1.5	96.1	2.4	0		26.8	10.1	63.1	0		91.1	4.2	4.6	0		
PHF	.654	.966	.693	.000	.909	.643	.900	.875	.000	.907	.833	.625	.870	.000	.909	.911	.583	.639	.000	.905	.959



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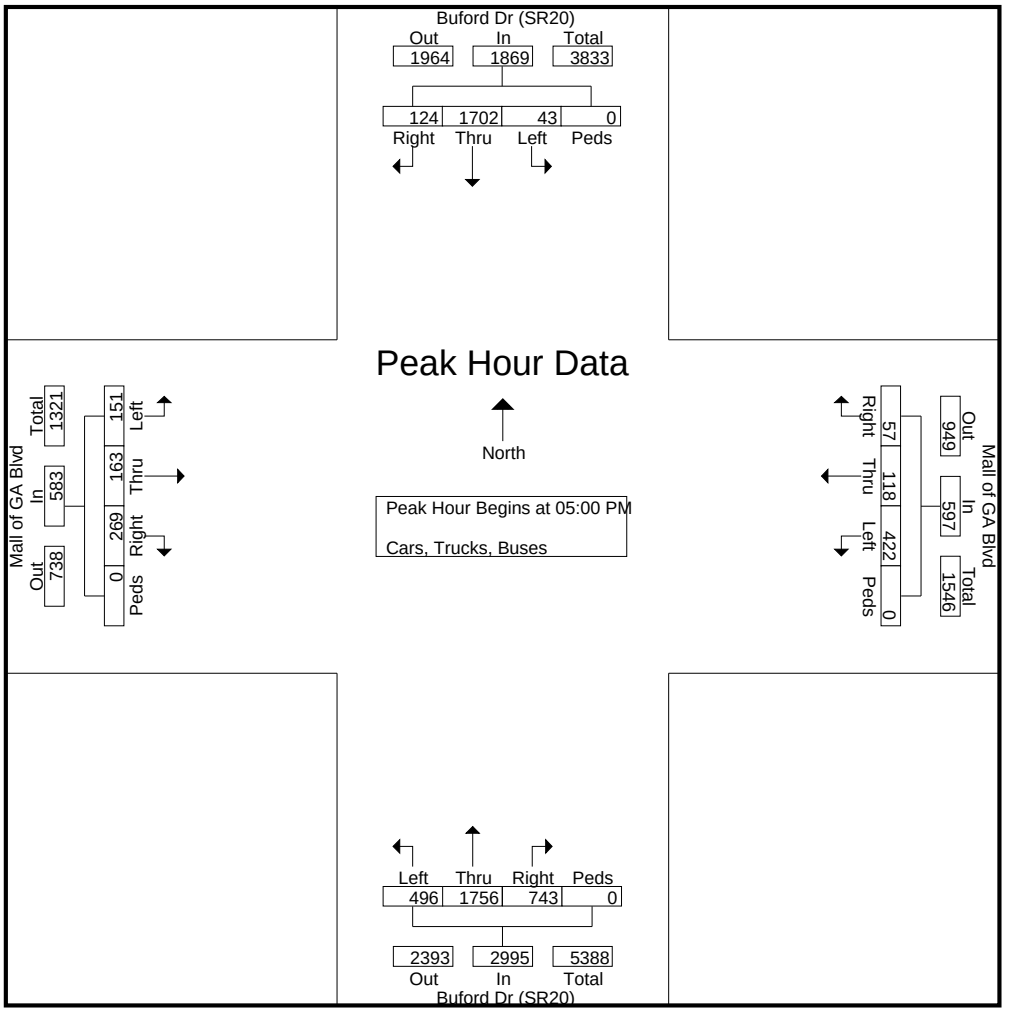
TMC Data
Buford Dr (SR20) @ Mall of GA Blvd

7-9am I 4.30-6.30pm

File Name : 38080001
Site Code : 38080001
Start Date : 3/22/2016
Page No : 3

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	117	444	187	0	748	11	**449**	29	0	**489**	30	33	77	0	140	**118**	25	17	0	**160**	**1537**
05:15 PM	121	451	**189**	0	761	9	442	23	0	474	**47**	39	59	0	145	99	31	14	0	144	1524
05:30 PM	109	409	186	0	704	**13**	419	23	0	455	40	**46**	**81**	0	**167**	96	28	**19**	0	143	1469
05:45 PM	**149**	**452**	181	0	**782**	10	392	**49**	0	451	34	45	52	0	131	109	**34**	7	0	150	1514
Total Volume	496	1756	743	0	2995	43	1702	124	0	1869	151	163	269	0	583	422	118	57	0	597	6044
% App. Total	16.6	58.6	24.8	0		2.3	91.1	6.6	0		25.9	28	46.1	0		70.7	19.8	9.5	0		
PHF	.832	.971	.983	.000	.957	.827	.948	.633	.000	.956	.803	.886	.830	.000	.873	.894	.868	.750	.000	.933	.983



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TMC Data
Buford Dr (SR20) @ Mall of GA Blvd

3pm - 6pm Sat

File Name : 38080001-Sat
Site Code : 38080001
Start Date : 3/12/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	172	473	163	0	808	26	418	54	0	498	93	56	137	0	286	173	57	14	0	244	1836
03:15 PM	211	552	168	0	931	39	468	64	0	571	85	64	167	0	316	177	65	12	0	254	2072
03:30 PM	196	558	176	0	930	21	447	41	0	509	79	76	218	0	373	180	68	22	0	270	2082
03:45 PM	229	617	184	0	1030	32	407	64	0	503	119	84	232	0	435	165	67	18	0	250	2218
Total	808	2200	691	0	3699	118	1740	223	0	2081	376	280	754	0	1410	695	257	66	0	1018	8208
04:00 PM	250	626	168	0	1044	28	472	56	0	556	125	109	227	0	461	171	72	15	0	258	2319
04:15 PM	220	631	154	0	1005	23	466	50	0	539	62	113	216	0	391	198	74	16	0	288	2223
04:30 PM	231	615	143	0	989	26	450	66	0	542	111	127	217	0	455	207	72	23	0	302	2288
04:45 PM	222	591	137	0	950	21	436	38	0	495	102	92	172	0	366	208	41	17	0	266	2077
Total	923	2463	602	0	3988	98	1824	210	0	2132	400	441	832	0	1673	784	259	71	0	1114	8907
05:00 PM	230	572	131	0	933	18	447	51	0	516	96	112	156	0	364	192	61	16	0	269	2082
05:15 PM	223	492	112	0	827	15	465	34	0	514	169	169	153	0	491	184	50	17	0	251	2083
05:30 PM	231	563	115	0	909	16	416	49	0	481	94	99	160	0	353	163	54	22	0	239	1982
05:45 PM	212	599	123	0	934	19	459	42	0	520	74	128	169	0	371	167	49	20	0	236	2061
Total	896	2226	481	0	3603	68	1787	176	0	2031	433	508	638	0	1579	706	214	75	0	995	8208
Grand Total	2627	6889	1774	0	11290	284	5351	609	0	6244	1209	1229	2224	0	4662	2185	730	212	0	3127	25323
Apprch %	23.3	61	15.7	0		4.5	85.7	9.8	0		25.9	26.4	47.7	0		69.9	23.3	6.8	0		
Total %	10.4	27.2	7	0	44.6	1.1	21.1	2.4	0	24.7	4.8	4.9	8.8	0	18.4	8.6	2.9	0.8	0	12.3	

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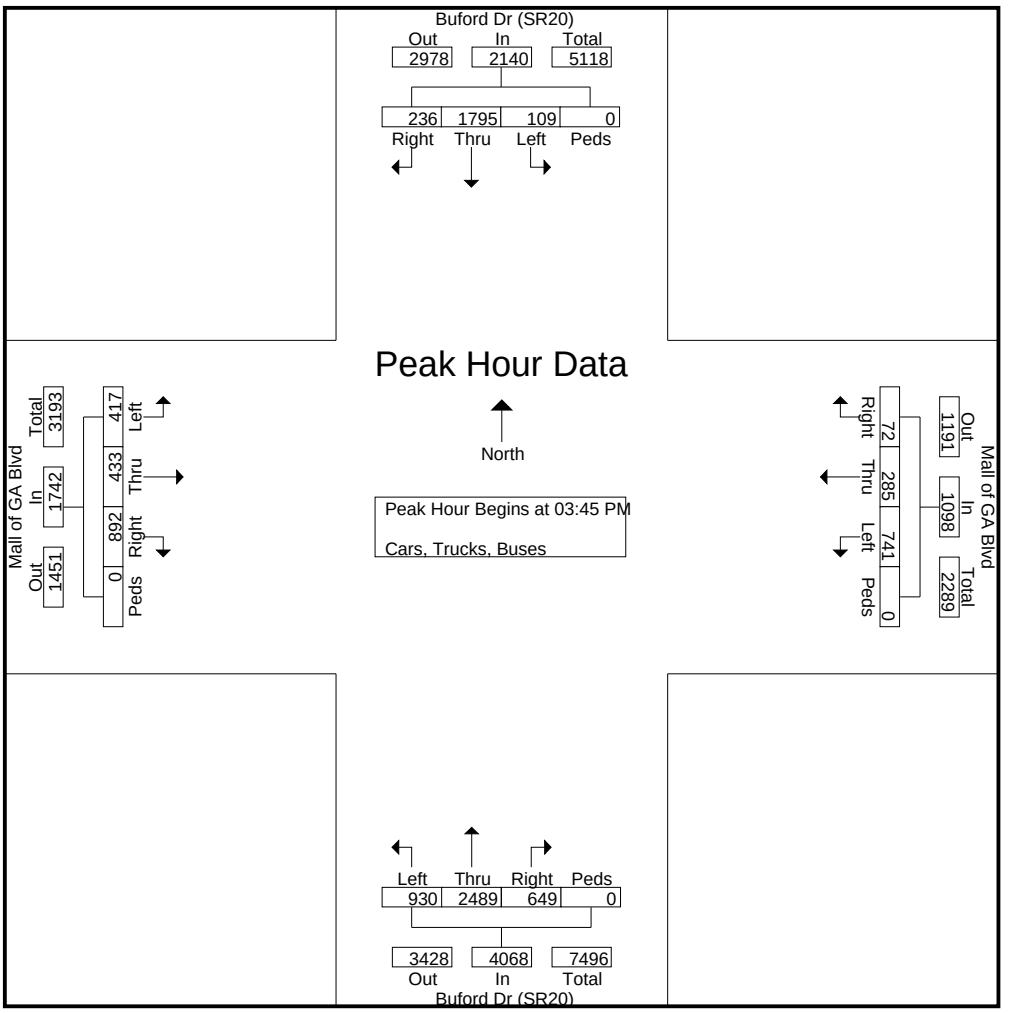
TMC Data
Buford Dr (SR20) @ Mall of GA Blvd

3pm - 6pm Sat

File Name : 38080001-Sat
Site Code : 38080001
Start Date : 3/12/2016
Page No : 2

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	229	617	**184**	0	1030	**32**	407	64	0	503	119	84	**232**	0	435	165	67	18	0	250	2218
04:00 PM	**250**	626	168	0	**1044**	28	**472**	56	0	**556**	**125**	109	227	0	**461**	171	72	15	0	258	**2319**
04:15 PM	220	**631**	154	0	1005	23	466	50	0	539	62	113	216	0	391	198	**74**	16	0	288	2223
04:30 PM	231	615	143	0	989	26	450	**66**	0	542	111	**127**	217	0	455	**207**	72	**23**	0	**302**	2288
Total Volume	930	2489	649	0	4068	109	1795	236	0	2140	417	433	892	0	1742	741	285	72	0	1098	9048
% App. Total	22.9	61.2	16	0		5.1	83.9	11	0		23.9	24.9	51.2	0		67.5	26	6.6	0		
PHF	.930	.986	.882	.000	.974	.852	.951	.894	.000	.962	.834	.852	.961	.000	.945	.895	.963	.783	.000	.909	.975



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TMC Data
Buford Dr (SR20) @
Woodward Crossing Blvd
7-9am I 4.30-6.30pm

File Name : 38080002
Site Code : 38080002
Start Date : 3/23/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mill Creek Village Comm Drwy Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	326	3	0	330	11	249	3	0	263	0	0	0	0	0	6	0	6	0	12	605
07:15 AM	1	354	5	0	360	16	300	3	0	319	2	1	0	0	3	5	2	4	0	11	693
07:30 AM	2	392	8	0	402	18	301	1	0	320	1	0	0	0	1	5	0	4	0	9	732
07:45 AM	1	404	16	0	421	26	281	8	0	315	1	1	1	0	3	8	2	6	0	16	755
Total	5	1476	32	0	1513	71	1131	15	0	1217	4	2	1	0	7	24	4	20	0	48	2785
08:00 AM	2	357	6	0	365	20	294	3	0	317	1	1	0	0	2	9	0	15	0	24	708
08:15 AM	3	346	16	0	365	21	281	4	0	306	2	0	1	0	3	12	1	10	0	23	697
08:30 AM	5	328	12	0	345	37	292	4	0	333	2	1	0	0	3	11	1	13	0	25	706
08:45 AM	7	376	22	0	405	41	279	3	0	323	3	1	2	0	6	15	4	20	0	39	773
Total	17	1407	56	0	1480	119	1146	14	0	1279	8	3	3	0	14	47	6	58	0	111	2884
*** BREAK ***																					
04:30 PM	6	396	37	0	439	87	401	3	0	491	7	4	10	0	21	63	5	47	0	115	1066
04:45 PM	9	408	45	0	462	92	451	14	0	557	12	10	3	0	25	60	6	51	0	117	1161
Total	15	804	82	0	901	179	852	17	0	1048	19	14	13	0	46	123	11	98	0	232	2227
05:00 PM	7	423	38	0	468	94	438	11	0	543	18	4	4	0	26	55	9	48	0	112	1149
05:15 PM	13	412	35	0	460	100	372	14	0	486	13	4	5	0	22	52	7	34	0	93	1061
05:30 PM	5	405	35	0	445	93	429	8	0	530	12	8	6	0	26	62	7	43	0	112	1113
05:45 PM	8	424	37	0	469	103	376	7	0	486	8	4	3	0	15	51	6	40	0	97	1067
Total	33	1664	145	0	1842	390	1615	40	0	2045	51	20	18	0	89	220	29	165	0	414	4390
06:00 PM	4	392	29	0	425	80	425	5	0	510	18	7	4	0	29	46	5	39	0	90	1054
06:15 PM	5	386	28	0	419	83	454	8	0	545	11	1	7	0	19	56	5	41	0	102	1085
Grand Total	79	6129	372	0	6580	922	5623	99	0	6644	111	47	46	0	204	516	60	421	0	997	14425
Apprch %	1.2	93.1	5.7	0		13.9	84.6	1.5	0		54.4	23	22.5	0		51.8	6	42.2	0		
Total %	0.5	42.5	2.6	0	45.6	6.4	39	0.7	0	46.1	0.8	0.3	0.3	0	1.4	3.6	0.4	2.9	0	6.9	

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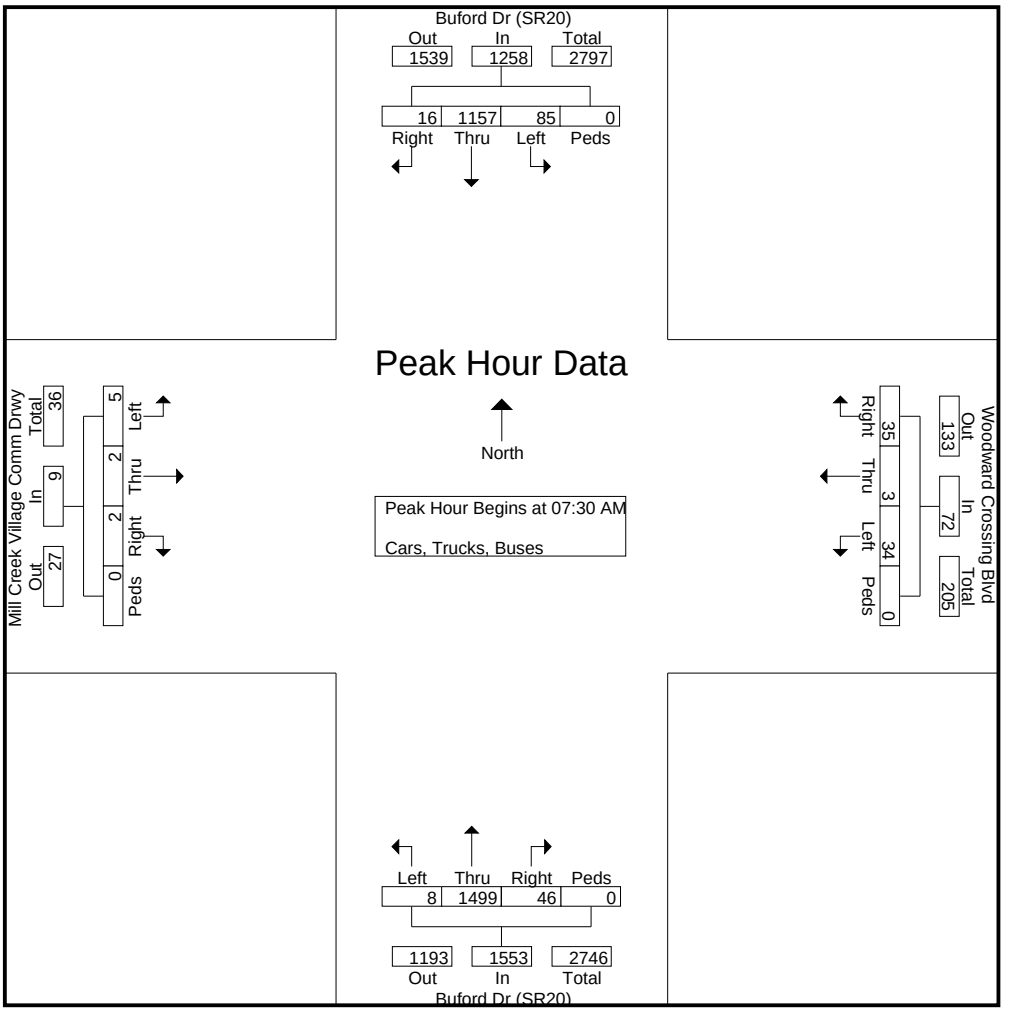
TMC Data
Buford Dr (SR20) @
Woodward Crossing Blvd
7-9am I 4.30-6.30pm

File Name : 38080002
Site Code : 38080002
Start Date : 3/23/2016
Page No : 2

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mill Creek Village Comm Drwy Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:30 AM																					
07:30 AM	2	392	8	0	402	18	**301**	1	0	**320**	1	0	0	0	1	5	0	4	0	9	732
07:45 AM	1	**404**	**16**	0	**421**	**26**	281	**8**	0	315	1	**1**	**1**	0	**3**	8	**2**	6	0	16	**755**
08:00 AM	2	357	6	0	365	20	294	3	0	317	1	1	0	0	2	9	0	**15**	0	**24**	708
08:15 AM	**3**	346	16	0	365	21	281	4	0	306	**2**	0	1	0	3	**12**	1	10	0	23	697
Total Volume	8	1499	46	0	1553	85	1157	16	0	1258	5	2	2	0	9	34	3	35	0	72	2892
% App. Total	0.5	96.5	3	0		6.8	92	1.3	0		55.6	22.2	22.2	0		47.2	4.2	48.6	0		
PHF	.667	.928	.719	.000	.922	.817	.961	.500	.000	.983	.625	.500	.500	.000	.750	.708	.375	.583	.000	.750	.958



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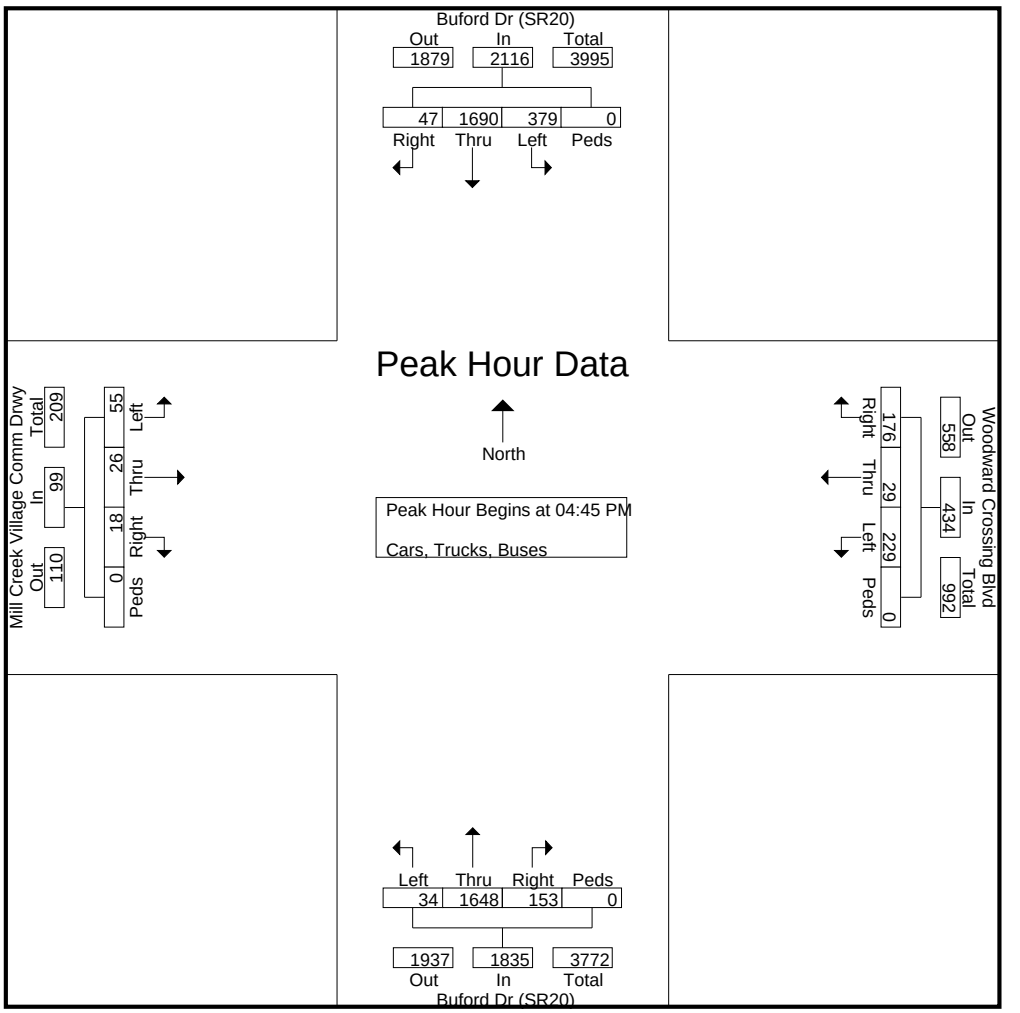
TMC Data
Buford Dr (SR20) @
Woodward Crossing Blvd
7-9am I 4.30-6.30pm

File Name : 38080002
Site Code : 38080002
Start Date : 3/23/2016
Page No : 3

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mill Creek Village Comm Drwy Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	9	408	**45**	0	462	92	**451**	**14**	0	**557**	12	**10**	3	0	25	60	6	**51**	0	**117**	**1161**
05:00 PM	7	**423**	38	0	**468**	94	438	11	0	543	**18**	4	4	0	**26**	55	**9**	48	0	112	1149
05:15 PM	**13**	412	35	0	460	**100**	372	14	0	486	13	4	5	0	22	52	7	34	0	93	1061
05:30 PM	5	405	35	0	445	93	429	8	0	530	12	8	**6**	0	26	**62**	7	43	0	112	1113
Total Volume	34	1648	153	0	1835	379	1690	47	0	2116	55	26	18	0	99	229	29	176	0	434	4484
% App. Total	1.9	89.8	8.3	0		17.9	79.9	2.2	0		55.6	26.3	18.2	0		52.8	6.7	40.6	0		
PHF	.654	.974	.850	.000	.980	.948	.937	.839	.000	.950	.764	.650	.750	.000	.952	.923	.806	.863	.000	.927	.966



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TMC Data
Buford Dr (SR20) @
Woodward Crossing Blvd
3pm - 6pm Sat

File Name : 38080002-Sat
Site Code : 38080002
Start Date : 3/19/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mill Creek Village Comm Drwy Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	9	411	62	0	482	161	391	12	0	564	25	18	10	0	53	115	22	79	0	216	1315
03:15 PM	13	415	64	0	492	165	380	19	0	564	13	16	5	0	34	112	18	84	0	214	1304
03:30 PM	12	414	67	0	493	166	375	14	0	555	19	18	7	0	44	109	16	93	0	218	1310
03:45 PM	9	417	63	0	489	169	384	9	0	562	17	20	4	0	41	106	19	76	0	201	1293
Total	43	1657	256	0	1956	661	1530	54	0	2245	74	72	26	0	172	442	75	332	0	849	5222
04:00 PM	10	428	68	0	506	164	379	20	0	563	18	17	7	0	42	115	27	64	0	206	1317
04:15 PM	13	437	62	0	512	147	386	14	0	547	24	14	9	0	47	111	25	92	0	228	1334
04:30 PM	12	431	66	0	509	171	378	16	0	565	15	15	1	0	31	108	21	85	0	214	1319
04:45 PM	10	434	69	0	513	175	364	9	0	548	20	13	10	0	43	101	18	82	0	201	1305
Total	45	1730	265	0	2040	657	1507	59	0	2223	77	59	27	0	163	435	91	323	0	849	5275
05:00 PM	11	423	67	0	501	171	372	20	0	563	16	16	4	0	36	108	16	64	0	188	1288
05:15 PM	9	418	65	0	492	140	377	13	0	530	12	13	12	0	37	107	19	77	0	203	1262
05:30 PM	11	397	63	0	471	142	383	16	0	541	16	13	6	0	35	102	16	89	0	207	1254
05:45 PM	13	386	58	0	457	165	397	18	0	580	16	10	4	0	30	99	17	83	0	199	1266
Total	44	1624	253	0	1921	618	1529	67	0	2214	60	52	26	0	138	416	68	313	0	797	5070
Grand Total	132	5011	774	0	5917	1936	4566	180	0	6682	211	183	79	0	473	1293	234	968	0	2495	15567
Apprch %	2.2	84.7	13.1	0		29	68.3	2.7	0		44.6	38.7	16.7	0		51.8	9.4	38.8	0		
Total %	0.8	32.2	5	0	38	12.4	29.3	1.2	0	42.9	1.4	1.2	0.5	0	3	8.3	1.5	6.2	0	16	

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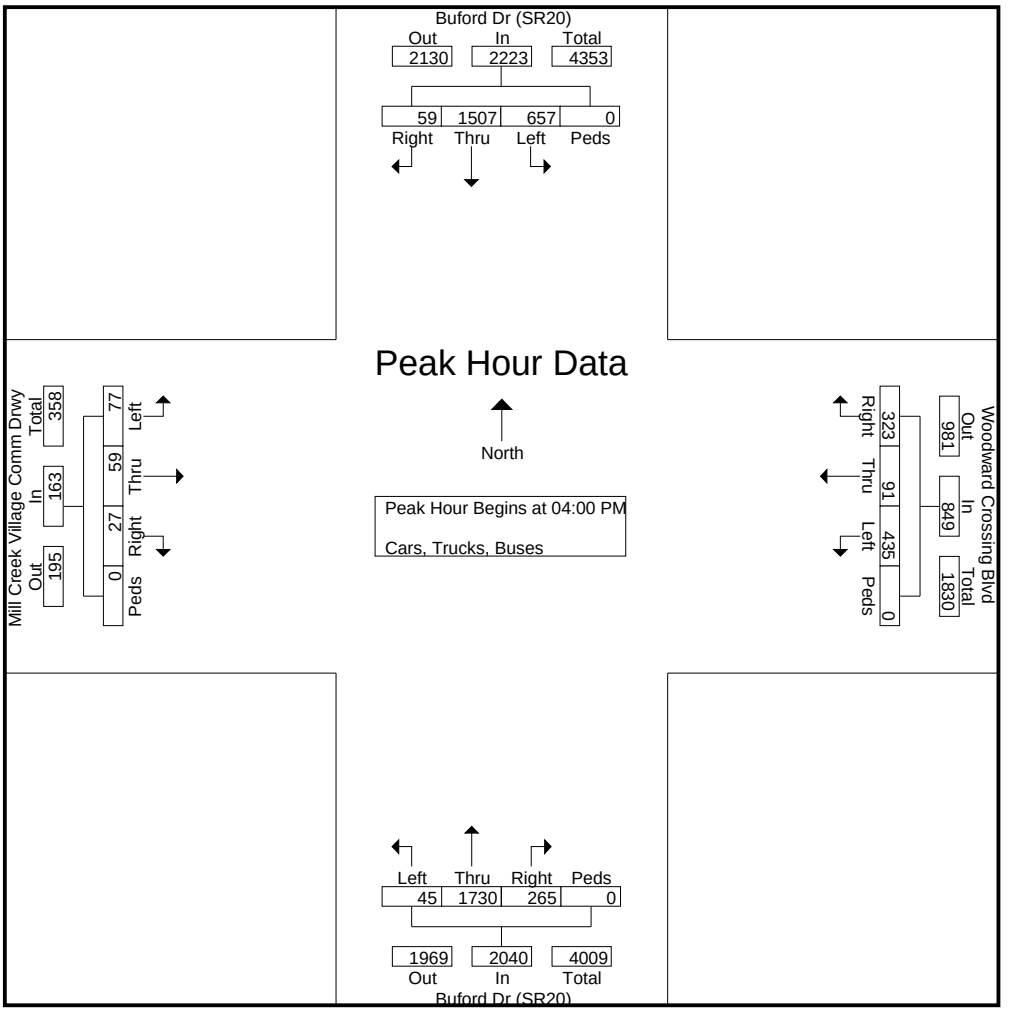
TMC Data
Buford Dr (SR20) @
Woodward Crossing Blvd
3pm - 6pm Sat

File Name : 38080002-Sat
Site Code : 38080002
Start Date : 3/19/2016
Page No : 2

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Mill Creek Village Comm Drwy Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	10	428	68	0	506	164	379	**20**	0	563	18	**17**	7	0	42	**115**	**27**	64	0	206	1317
04:15 PM	**13**	**437**	62	0	512	147	**386**	14	0	547	**24**	14	9	0	**47**	111	25	**92**	0	**228**	**1334**
04:30 PM	12	431	66	0	509	171	378	16	0	**565**	15	15	1	0	31	108	21	85	0	214	1319
04:45 PM	10	434	**69**	0	**513**	**175**	364	9	0	548	20	13	**10**	0	43	101	18	82	0	201	1305
Total Volume	45	1730	265	0	2040	657	1507	59	0	2223	77	59	27	0	163	435	91	323	0	849	5275
% App. Total	2.2	84.8	13	0		29.6	67.8	2.7	0		47.2	36.2	16.6	0		51.2	10.7	38	0		
PHF	.865	.990	.960	.000	.994	.939	.976	.738	.000	.984	.802	.868	.675	.000	.867	.946	.843	.878	.000	.931	.989



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TMC Data
Mall of GA Blvd @ Coastal Ave

7-9am I 4.30-6.30pm

File Name : 38080003
Site Code : 38080003
Start Date : 3/22/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Bassett Home Furnishings Drwy Northbound					Coastal Ave Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	2	0	1	0	3	3	22	1	0	26	0	113	8	0	121	150
07:15 AM	0	0	0	0	0	1	0	1	0	2	1	34	0	0	35	0	118	6	0	124	161
07:30 AM	0	0	0	0	0	1	0	3	0	4	3	43	0	0	46	0	112	5	0	117	167
07:45 AM	1	1	0	0	2	1	0	2	0	3	12	50	0	0	62	0	118	8	0	126	193
Total	1	1	0	0	2	5	0	7	0	12	19	149	1	0	169	0	461	27	0	488	671
08:00 AM	0	0	0	0	0	2	0	1	0	3	7	43	0	0	50	1	113	6	0	120	173
08:15 AM	1	0	0	0	1	7	0	5	0	12	13	46	0	0	59	0	102	8	0	110	182
08:30 AM	1	1	0	0	2	2	0	1	0	3	13	49	0	0	62	1	99	4	0	104	171
08:45 AM	0	0	1	0	1	1	0	2	0	3	8	38	1	0	47	1	96	5	0	102	153
Total	2	1	1	0	4	12	0	9	0	21	41	176	1	0	218	3	410	23	0	436	679
*** BREAK ***																					
04:30 PM	11	1	2	0	14	16	1	32	0	49	70	206	1	0	277	0	102	7	0	109	449
04:45 PM	8	1	3	0	12	9	5	31	0	45	48	199	1	0	248	7	85	9	0	101	406
Total	19	2	5	0	26	25	6	63	0	94	118	405	2	0	525	7	187	16	0	210	855
05:00 PM	14	1	0	0	15	21	2	22	0	45	50	190	0	0	240	4	111	13	0	128	428
05:15 PM	7	0	0	0	7	20	2	28	0	50	50	168	2	0	220	7	98	4	0	109	386
05:30 PM	3	0	0	0	3	31	5	26	0	62	61	207	1	0	269	1	110	15	0	126	460
05:45 PM	6	1	1	0	8	21	0	30	0	51	50	198	1	0	249	4	92	10	0	106	414
Total	30	2	1	0	33	93	9	106	0	208	211	763	4	0	978	16	411	42	0	469	1688
06:00 PM	11	0	3	0	14	16	6	24	0	46	47	166	2	0	215	4	119	11	0	134	409
06:15 PM	10	1	2	0	13	20	4	31	0	55	41	178	1	0	220	2	106	15	0	123	411
Grand Total	73	7	12	0	92	171	25	240	0	436	477	1837	11	0	2325	32	1694	134	0	1860	4713
Apprch %	79.3	7.6	13	0		39.2	5.7	55	0		20.5	79	0.5	0		1.7	91.1	7.2	0		
Total %	1.5	0.1	0.3	0	2	3.6	0.5	5.1	0	9.3	10.1	39	0.2	0	49.3	0.7	35.9	2.8	0	39.5	

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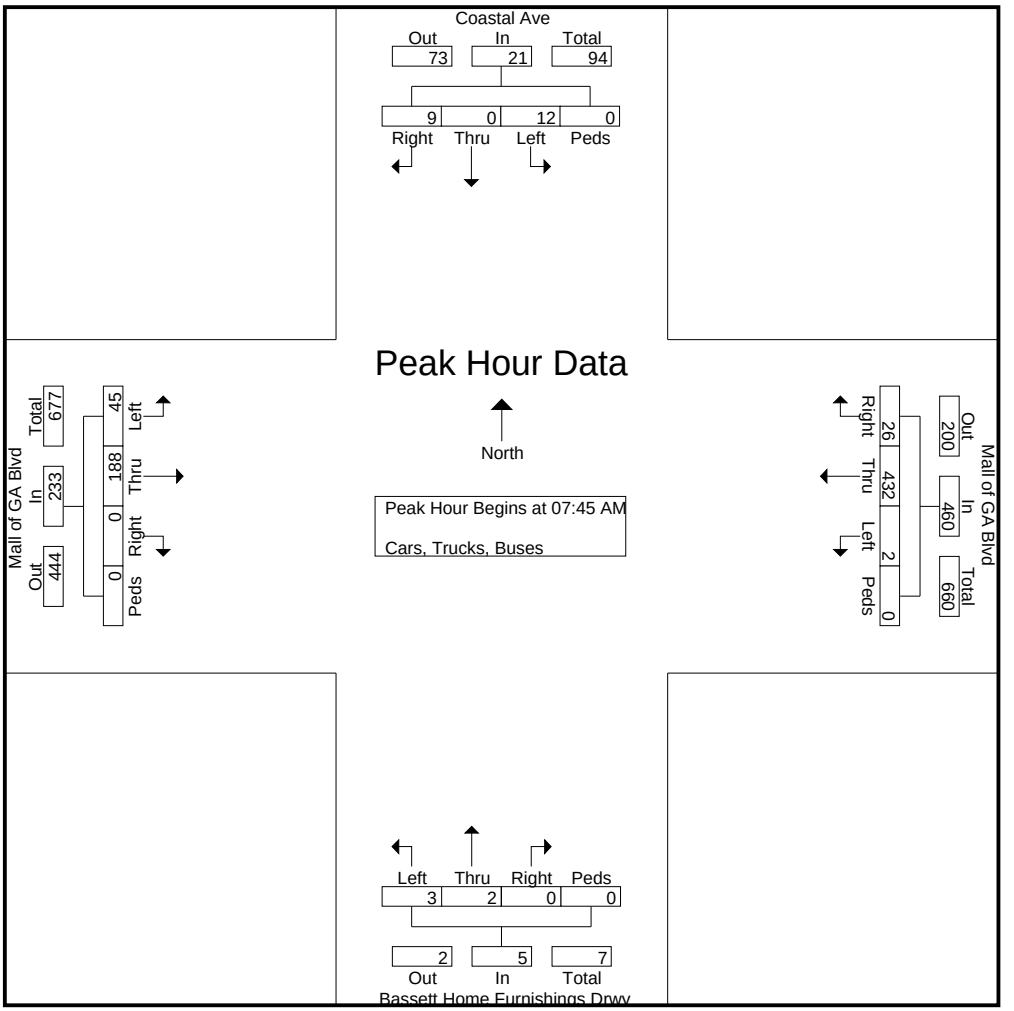
TMC Data
Mall of GA Blvd @ Coastal Ave

7-9am I 4.30-6.30pm

File Name : 38080003
Site Code : 38080003
Start Date : 3/22/2016
Page No : 2

	Bassett Home Furnishings Drwy Northbound					Coastal Ave Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:45 AM																					
07:45 AM	**1**	**1**	0	0	**2**	1	0	2	0	3	12	**50**	0	0	**62**	0	**118**	**8**	0	**126**	**193**
08:00 AM	0	0	0	0	0	2	0	1	0	3	7	43	0	0	50	**1**	113	6	0	120	173
08:15 AM	1	0	0	0	1	**7**	0	**5**	0	**12**	**13**	46	0	0	59	0	102	8	0	110	182
08:30 AM	1	1	0	0	2	2	0	1	0	3	13	49	0	0	62	1	99	4	0	104	171
Total Volume	3	2	0	0	5	12	0	9	0	21	45	188	0	0	233	2	432	26	0	460	719
% App. Total	60	40	0	0		57.1	0	42.9	0		19.3	80.7	0	0		0.4	93.9	5.7	0		
PHF	.750	.500	.000	.000	.625	.429	.000	.450	.000	.438	.865	.940	.000	.000	.940	.500	.915	.813	.000	.913	.931



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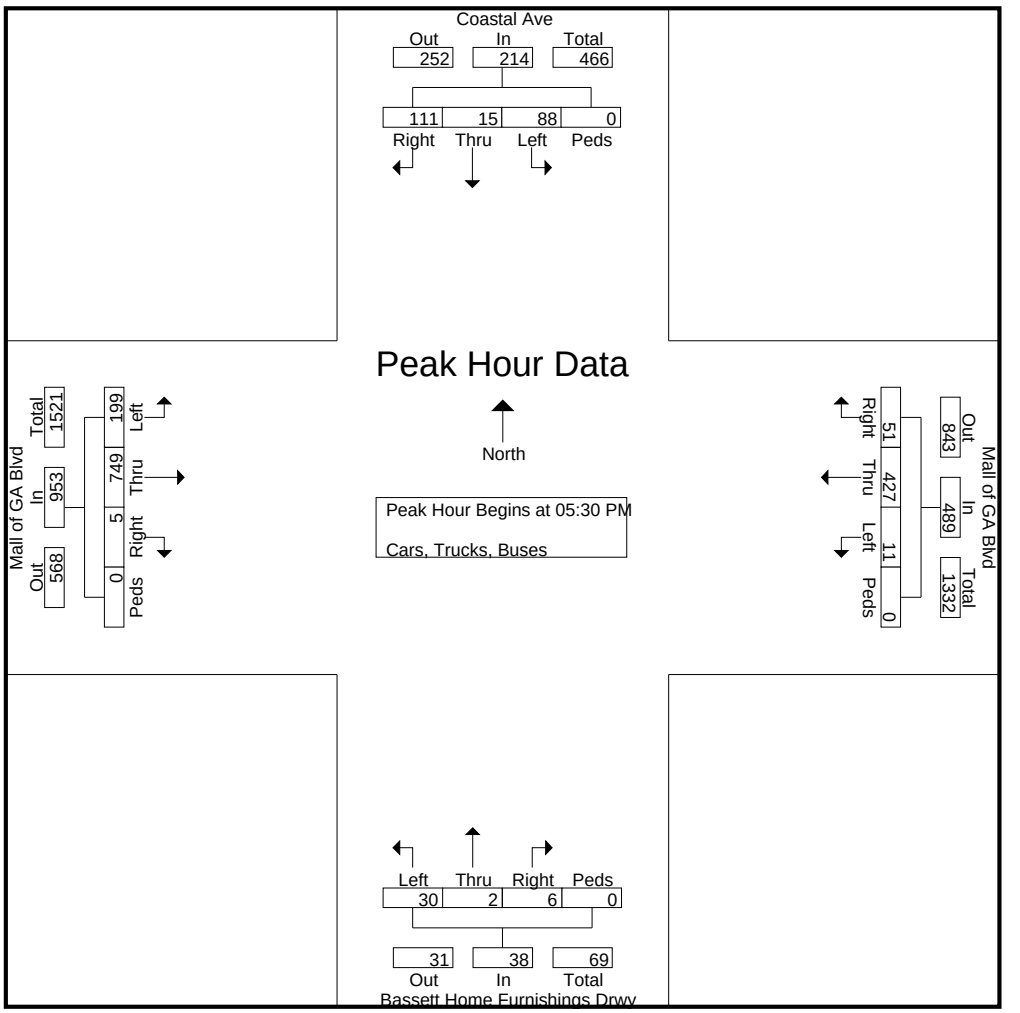
TMC Data
Mall of GA Blvd @ Coastal Ave

7-9am I 4.30-6.30pm

File Name : 38080003
Site Code : 38080003
Start Date : 3/22/2016
Page No : 3

	Bassett Home Furnishings Drwy Northbound					Coastal Ave Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:30 PM																					
05:30 PM	3	0	0	0	3	**31**	5	26	0	**62**	**61**	**207**	1	0	**269**	1	110	**15**	0	126	**460**
05:45 PM	6	**1**	1	0	8	21	0	30	0	51	50	198	1	0	249	**4**	92	10	0	106	414
06:00 PM	**11**	0	**3**	0	**14**	16	**6**	24	0	46	47	166	**2**	0	215	4	**119**	11	0	**134**	409
06:15 PM	10	1	2	0	13	20	4	**31**	0	55	41	178	1	0	220	2	106	15	0	123	411
Total Volume	30	2	6	0	38	88	15	111	0	214	199	749	5	0	953	11	427	51	0	489	1694
% App. Total	78.9	5.3	15.8	0		41.1	7	51.9	0		20.9	78.6	0.5	0		2.2	87.3	10.4	0		
PHF	.682	.500	.500	.000	.679	.710	.625	.895	.000	.863	.816	.905	.625	.000	.886	.688	.897	.850	.000	.912	.921



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TMC Data
Mall of GA Blvd @ Coastal Ave

3pm - 6pm Sat

File Name : 38080003-Sat
Site Code : 38080003
Start Date : 3/12/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Bassett Home Furnishings Drwy Northbound					Coastal Ave Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	14	3	2	0	19	31	3	58	0	92	76	199	4	0	279	6	174	17	0	197	587
03:15 PM	11	4	3	0	18	36	1	63	0	100	84	196	2	0	282	4	179	9	0	192	592
03:30 PM	12	2	4	0	18	35	5	67	0	107	86	192	2	0	280	5	173	10	0	188	593
03:45 PM	6	3	3	0	12	34	0	70	0	104	78	199	2	0	279	5	168	8	0	181	576
Total	43	12	12	0	67	136	9	258	0	403	324	786	10	0	1120	20	694	44	0	758	2348
04:00 PM	16	3	2	0	21	32	9	75	0	116	82	201	2	0	285	10	176	16	0	202	624
04:15 PM	10	2	7	0	19	35	4	73	0	112	85	205	2	0	292	7	183	22	0	212	635
04:30 PM	12	3	5	0	20	37	4	52	0	93	89	211	4	0	304	5	189	18	0	212	629
04:45 PM	6	1	2	0	9	34	2	70	0	106	92	209	0	0	301	8	188	21	0	217	633
Total	44	9	16	0	69	138	19	270	0	427	348	826	8	0	1182	30	736	77	0	843	2521
05:00 PM	7	3	3	0	13	31	3	87	0	121	77	203	4	0	284	4	173	33	0	210	628
05:15 PM	13	3	4	0	20	28	3	68	0	99	76	195	5	0	276	14	169	14	0	197	592
05:30 PM	10	4	1	0	15	25	6	66	0	97	81	187	4	0	272	6	164	27	0	197	581
05:45 PM	11	6	3	0	20	22	9	52	0	83	75	172	6	0	253	2	162	19	0	183	539
Total	41	16	11	0	68	106	21	273	0	400	309	757	19	0	1085	26	668	93	0	787	2340
Grand Total	128	37	39	0	204	380	49	801	0	1230	981	2369	37	0	3387	76	2098	214	0	2388	7209
Apprch %	62.7	18.1	19.1	0		30.9	4	65.1	0		29	69.9	1.1	0		3.2	87.9	9	0		
Total %	1.8	0.5	0.5	0	2.8	5.3	0.7	11.1	0	17.1	13.6	32.9	0.5	0	47	1.1	29.1	3	0	33.1	

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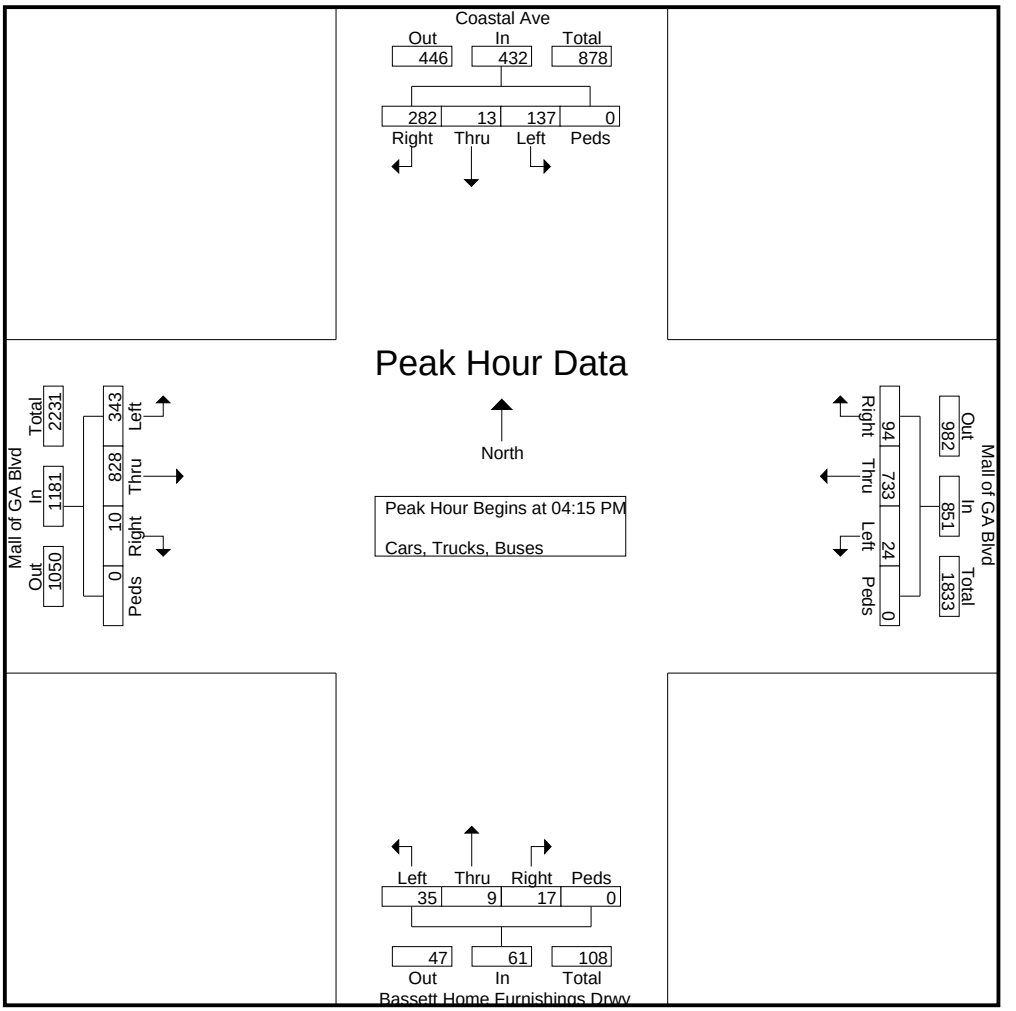
TMC Data
Mall of GA Blvd @ Coastal Ave

3pm - 6pm Sat

File Name : 38080003-Sat
Site Code : 38080003
Start Date : 3/12/2016
Page No : 2

	Bassett Home Furnishings Drwy Northbound					Coastal Ave Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	10	2	**7**	0	19	35	**4**	73	0	112	85	205	2	0	292	7	183	22	0	212	**635**
04:30 PM	**12**	**3**	5	0	**20**	**37**	4	52	0	93	89	**211**	**4**	0	**304**	5	**189**	18	0	212	629
04:45 PM	6	1	2	0	9	34	2	70	0	106	**92**	209	0	0	301	**8**	188	21	0	**217**	633
05:00 PM	7	3	3	0	13	31	3	**87**	0	**121**	77	203	4	0	284	4	173	**33**	0	210	628
Total Volume	35	9	17	0	61	137	13	282	0	432	343	828	10	0	1181	24	733	94	0	851	2525
% App. Total	57.4	14.8	27.9	0		31.7	3	65.3	0		29	70.1	0.8	0		2.8	86.1	11	0		
PHF	.729	.750	.607	.000	.763	.926	.813	.810	.000	.893	.932	.981	.625	.000	.971	.750	.970	.712	.000	.980	.994



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TMC Data
Mall of GA Blvd @ Nature Center Pkwy

7-9am I 4.30-6.30pm

File Name : 38080004
Site Code : 38080004
Start Date : 3/22/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Once Upon a Child Comm Drwy Northbound					Nature Center Pkwy Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	1	0	1	3	14	0	0	17	1	108	1	0	110	128
07:15 AM	0	0	0	0	0	0	0	2	0	2	5	24	0	0	29	0	105	0	0	105	136
07:30 AM	0	0	0	0	0	0	0	2	0	2	10	35	0	0	45	2	150	0	0	152	199
07:45 AM	0	0	0	0	0	0	0	2	0	2	6	48	0	0	54	3	113	3	0	119	175
Total	0	0	0	0	0	0	0	7	0	7	24	121	0	0	145	6	476	4	0	486	638
08:00 AM	0	0	0	0	0	1	0	1	0	2	9	38	0	0	47	0	110	4	0	114	163
08:15 AM	0	1	0	0	1	0	0	1	0	1	4	38	0	0	42	2	116	0	0	118	162
08:30 AM	0	0	0	0	0	0	0	2	0	2	9	45	0	0	54	2	112	2	0	116	172
08:45 AM	0	0	2	0	2	0	0	5	0	5	15	38	0	0	53	2	87	3	0	92	152
Total	0	1	2	0	3	1	0	9	0	10	37	159	0	0	196	6	425	9	0	440	649
*** BREAK ***																					
04:30 PM	2	1	3	0	6	12	1	15	0	28	21	195	4	0	220	4	91	4	0	99	353
04:45 PM	3	0	2	0	5	10	0	9	0	19	21	173	2	0	196	1	72	8	0	81	301
Total	5	1	5	0	11	22	1	24	0	47	42	368	6	0	416	5	163	12	0	180	654
05:00 PM	1	1	3	0	5	10	0	22	0	32	19	182	1	0	202	2	104	5	0	111	350
05:15 PM	4	0	3	0	7	16	0	10	0	26	19	201	1	0	221	3	103	3	0	109	363
05:30 PM	2	0	1	0	3	8	1	11	0	20	18	200	2	0	220	4	105	5	0	114	357
05:45 PM	1	0	4	0	5	9	0	10	0	19	33	198	0	0	231	5	109	7	0	121	376
Total	8	1	11	0	20	43	1	53	0	97	89	781	4	0	874	14	421	20	0	455	1446
06:00 PM	1	0	6	0	7	11	0	17	0	28	23	184	2	0	209	2	110	5	0	117	361
06:15 PM	2	1	5	0	8	6	0	12	0	18	24	163	0	0	187	2	93	9	0	104	317
Grand Total	16	4	29	0	49	83	2	122	0	207	239	1776	12	0	2027	35	1688	59	0	1782	4065
Apprch %	32.7	8.2	59.2	0		40.1	1	58.9	0		11.8	87.6	0.6	0		2	94.7	3.3	0		
Total %	0.4	0.1	0.7	0	1.2	2	0	3	0	5.1	5.9	43.7	0.3	0	49.9	0.9	41.5	1.5	0	43.8	

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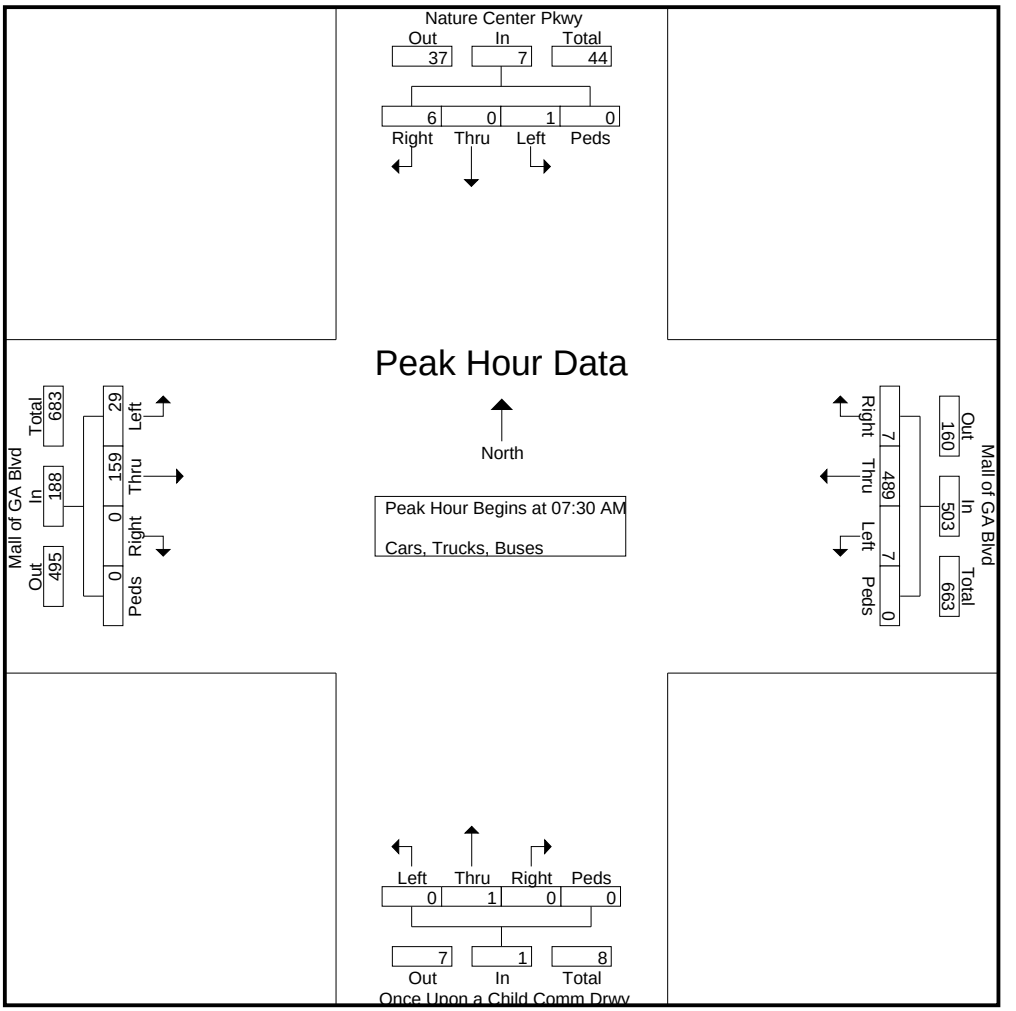
TMC Data
Mall of GA Blvd @ Nature Center Pkwy

7-9am I 4.30-6.30pm

File Name : 38080004
Site Code : 38080004
Start Date : 3/22/2016

	Once Upon a Child Comm Drwy Northbound					Nature Center Pkwy Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:30 AM																					
07:30 AM	0	0	0	0	0	0	0	**2**	0	**2**	**10**	35	0	0	45	2	**150**	0	0	**152**	**199**
07:45 AM	0	0	0	0	0	0	0	2	0	2	6	**48**	0	0	**54**	**3**	113	3	0	119	175
08:00 AM	0	0	0	0	0	**1**	0	1	0	2	9	38	0	0	47	0	110	**4**	0	114	163
08:15 AM	0	**1**	0	0	**1**	0	0	1	0	1	4	38	0	0	42	2	116	0	0	118	162
Total Volume	0	1	0	0	1	1	0	6	0	7	29	159	0	0	188	7	489	7	0	503	699
% App. Total	0	100	0	0		14.3	0	85.7	0		15.4	84.6	0	0		1.4	97.2	1.4	0		
PHF	.000	.250	.000	.000	.250	.250	.000	.750	.000	.875	.725	.828	.000	.000	.870	.583	.815	.438	.000	.827	.878



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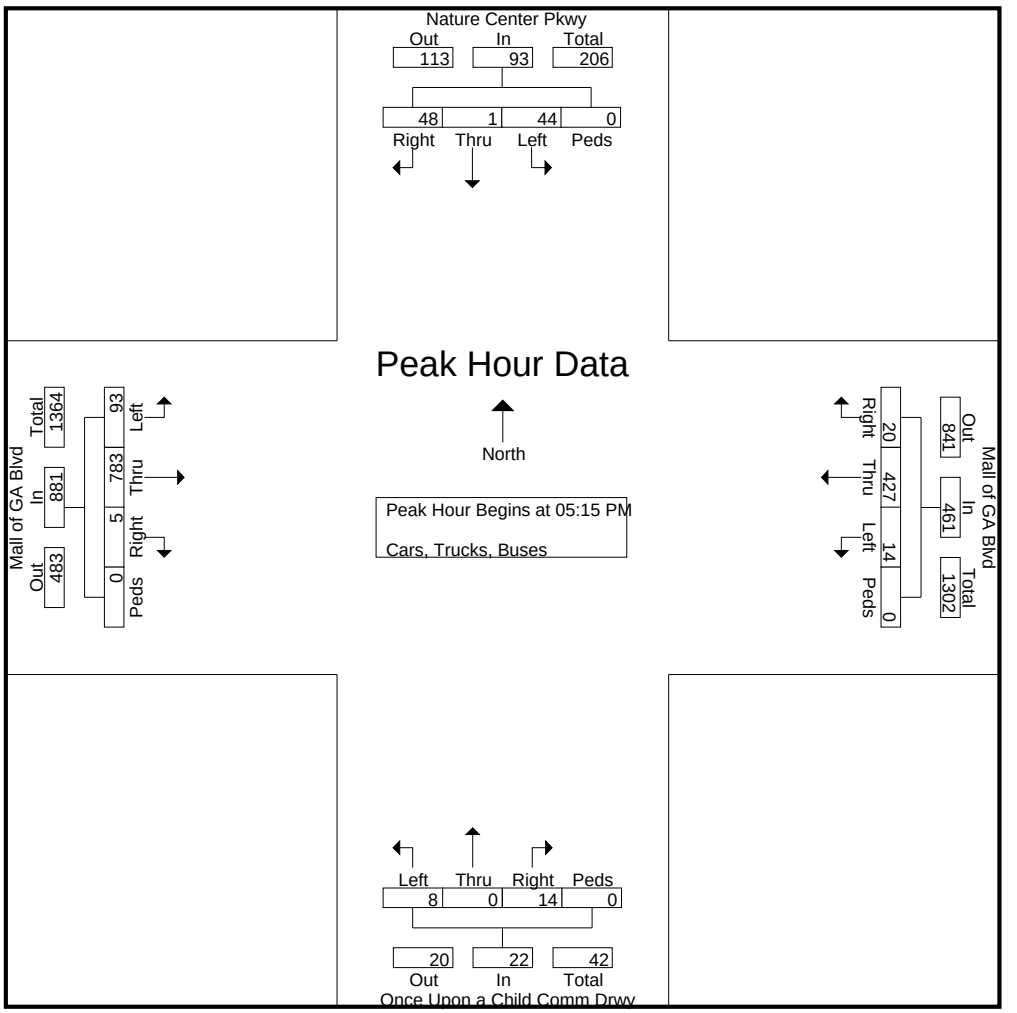
TMC Data
Mall of GA Blvd @ Nature Center Pkwy

7-9am I 4.30-6.30pm

File Name : 38080004
Site Code : 38080004
Start Date : 3/22/2016
Page No : 3

	Once Upon a Child Comm Drwy Northbound					Nature Center Pkwy Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:15 PM																					
05:15 PM	**4**	0	3	0	**7**	**16**	0	10	0	26	19	**201**	1	0	221	3	103	3	0	109	363
05:30 PM	2	0	1	0	3	8	**1**	11	0	20	18	200	**2**	0	220	4	105	5	0	114	357
05:45 PM	1	0	4	0	5	9	0	10	0	19	**33**	198	0	0	**231**	**5**	109	**7**	0	**121**	**376**
06:00 PM	1	0	**6**	0	7	11	0	**17**	0	**28**	23	184	2	0	209	2	**110**	5	0	117	361
Total Volume	8	0	14	0	22	44	1	48	0	93	93	783	5	0	881	14	427	20	0	461	1457
% App. Total	36.4	0	63.6	0		47.3	1.1	51.6	0		10.6	88.9	0.6	0		3	92.6	4.3	0		
PHF	.500	.000	.583	.000	.786	.688	.250	.706	.000	.830	.705	.974	.625	.000	.953	.700	.970	.714	.000	.952	.969



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TMC Data
Mall of GA Blvd @ Nature Center Pkwy

3pm - 6pm Sat

File Name : 38080004-Sat
Site Code : 38080004
Start Date : 3/12/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Once Upon a Child Comm Drwy Northbound					Nature Center Pkwy Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	3	1	18	0	22	15	6	38	0	59	64	163	3	0	230	4	164	21	0	189	500
03:15 PM	3	0	6	0	9	17	0	32	0	49	67	167	8	0	242	7	159	29	0	195	495
03:30 PM	1	1	8	0	10	12	0	28	0	40	69	172	8	0	249	10	175	22	0	207	506
03:45 PM	3	1	7	0	11	24	0	32	0	56	73	179	3	0	255	8	135	14	0	157	479
Total	10	3	39	0	52	68	6	130	0	204	273	681	22	0	976	29	633	86	0	748	1980
04:00 PM	3	1	5	0	9	31	0	45	0	76	66	185	4	0	255	10	148	16	0	174	514
04:15 PM	3	0	9	0	12	17	0	33	0	50	62	177	6	0	245	6	163	18	0	187	494
04:30 PM	2	1	6	0	9	31	2	40	0	73	83	171	3	0	257	9	152	16	0	177	516
04:45 PM	3	1	6	0	10	22	3	29	0	54	59	182	2	0	243	6	175	25	0	206	513
Total	11	3	26	0	40	101	5	147	0	253	270	715	15	0	1000	31	638	75	0	744	2037
05:00 PM	3	2	5	0	10	18	1	34	0	53	63	172	3	0	238	4	148	20	0	172	473
05:15 PM	6	3	4	0	13	22	0	47	0	69	48	184	1	0	233	8	131	19	0	158	473
05:30 PM	2	1	6	0	9	17	2	31	0	50	42	159	1	0	202	5	158	12	0	175	436
05:45 PM	0	0	10	0	10	19	0	32	0	51	57	163	1	0	221	3	171	18	0	192	474
Total	11	6	25	0	42	76	3	144	0	223	210	678	6	0	894	20	608	69	0	697	1856
Grand Total	32	12	90	0	134	245	14	421	0	680	753	2074	43	0	2870	80	1879	230	0	2189	5873
Apprch %	23.9	9	67.2	0		36	2.1	61.9	0		26.2	72.3	1.5	0		3.7	85.8	10.5	0		
Total %	0.5	0.2	1.5	0	2.3	4.2	0.2	7.2	0	11.6	12.8	35.3	0.7	0	48.9	1.4	32	3.9	0	37.3	

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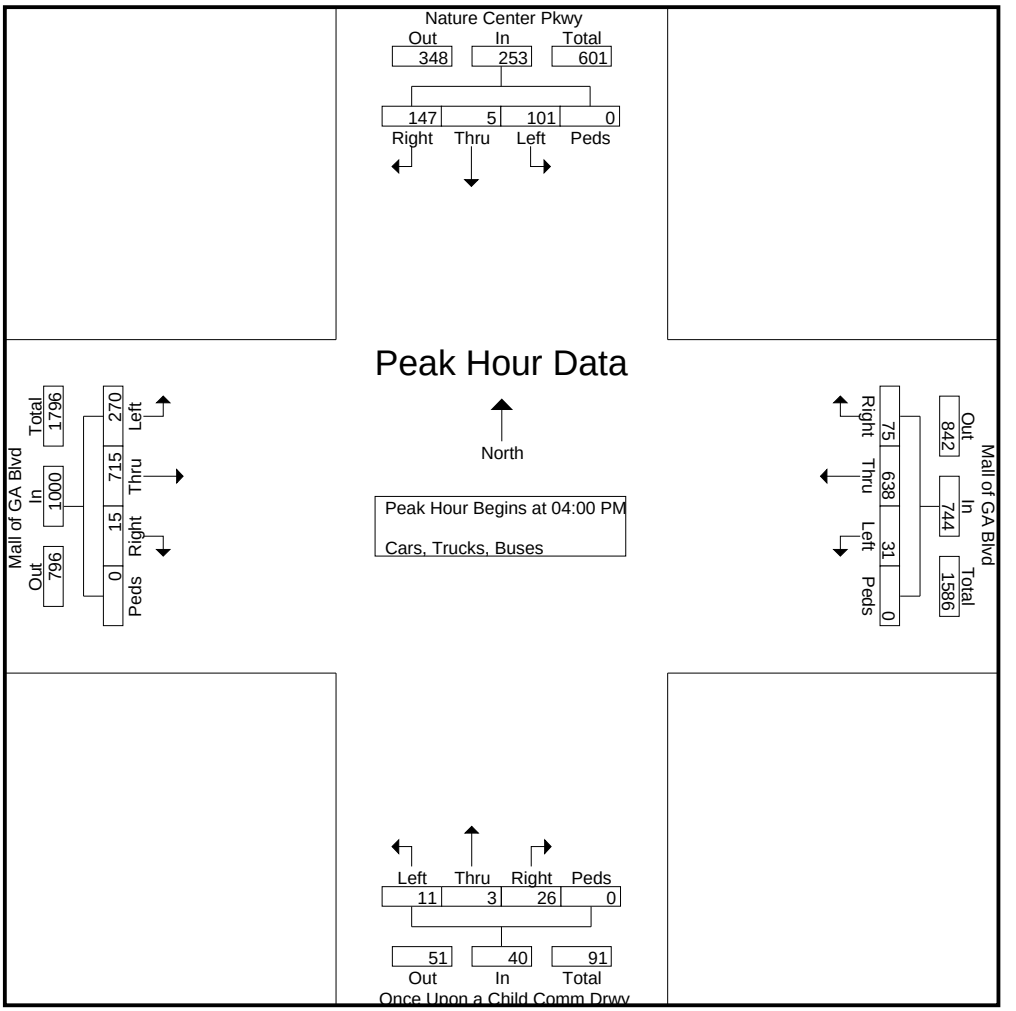
TMC Data
Mall of GA Blvd @ Nature Center Pkwy

3pm - 6pm Sat

File Name : 38080004-Sat
Site Code : 38080004
Start Date : 3/12/2016
Page No : 2

	Once Upon a Child Comm Drwy Northbound					Nature Center Pkwy Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**3**	**1**	5	0	9	**31**	0	**45**	0	**76**	66	**185**	4	0	255	**10**	148	16	0	174	514
04:15 PM	3	0	**9**	0	**12**	17	0	33	0	50	62	177	**6**	0	245	6	163	18	0	187	494
04:30 PM	2	1	6	0	9	31	2	40	0	73	**83**	171	3	0	**257**	9	152	16	0	177	**516**
04:45 PM	3	1	6	0	10	22	**3**	29	0	54	59	182	2	0	243	6	**175**	**25**	0	**206**	513
Total Volume	11	3	26	0	40	101	5	147	0	253	270	715	15	0	1000	31	638	75	0	744	2037
% App. Total	27.5	7.5	65	0		39.9	2	58.1	0		27	71.5	1.5	0		4.2	85.8	10.1	0		
PHF	.917	.750	.722	.000	.833	.815	.417	.817	.000	.832	.813	.966	.625	.000	.973	.775	.911	.750	.000	.903	.987



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TMC Data
Mall of GA Blvd @ Village Way Lane

7-9am I 4.30-6.30pm

File Name : 38080005
Site Code : 38080005
Start Date : 3/22/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Everyday Play Comm Drwy Northbound					Village Way Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	2	0	15	0	0	15	0	104	3	0	107	124
07:15 AM	0	0	0	0	0	0	0	0	0	0	4	18	0	0	22	0	127	2	0	129	151
07:30 AM	0	0	0	0	0	2	0	0	0	2	2	31	0	0	33	0	146	7	0	153	188
07:45 AM	0	0	0	0	0	3	0	2	0	5	8	38	0	0	46	0	118	4	0	122	173
Total	0	0	0	0	0	6	0	3	0	9	14	102	0	0	116	0	495	16	0	511	636
08:00 AM	0	0	0	0	0	0	0	4	0	4	8	34	0	0	42	0	103	7	0	110	156
08:15 AM	0	0	0	0	0	2	0	1	0	3	0	30	0	0	30	1	99	5	0	105	138
08:30 AM	0	0	0	0	0	3	0	2	0	5	8	36	0	0	44	0	129	5	0	134	183
08:45 AM	0	0	0	0	0	2	0	1	0	3	5	34	0	0	39	0	96	4	0	100	142
Total	0	0	0	0	0	7	0	8	0	15	21	134	0	0	155	1	427	21	0	449	619
*** BREAK ***																					
04:30 PM	0	0	0	0	0	16	0	23	0	39	12	187	0	0	199	4	84	9	0	97	335
04:45 PM	3	0	0	0	3	19	1	18	0	38	26	183	3	0	212	2	74	11	0	87	340
Total	3	0	0	0	3	35	1	41	0	77	38	370	3	0	411	6	158	20	0	184	675
05:00 PM	0	0	1	0	1	21	0	20	0	41	15	188	1	0	204	2	90	8	0	100	346
05:15 PM	0	2	0	0	2	17	0	23	0	40	14	186	2	0	202	1	69	9	0	79	323
05:30 PM	1	0	0	0	1	14	0	14	0	28	15	172	1	0	188	3	70	15	0	88	305
05:45 PM	0	0	0	0	0	16	0	22	0	38	17	188	1	0	206	1	103	13	0	117	361
Total	1	2	1	0	4	68	0	79	0	147	61	734	5	0	800	7	332	45	0	384	1335
06:00 PM	1	1	0	0	2	22	2	23	0	47	15	179	0	0	194	1	101	16	0	118	361
06:15 PM	1	0	0	0	1	12	0	23	0	35	15	176	1	0	192	2	104	14	0	120	348
Grand Total	6	3	1	0	10	150	3	177	0	330	164	1695	9	0	1868	17	1617	132	0	1766	3974
Apprch %	60	30	10	0		45.5	0.9	53.6	0		8.8	90.7	0.5	0		1	91.6	7.5	0		
Total %	0.2	0.1	0	0	0.3	3.8	0.1	4.5	0	8.3	4.1	42.7	0.2	0	47	0.4	40.7	3.3	0	44.4	

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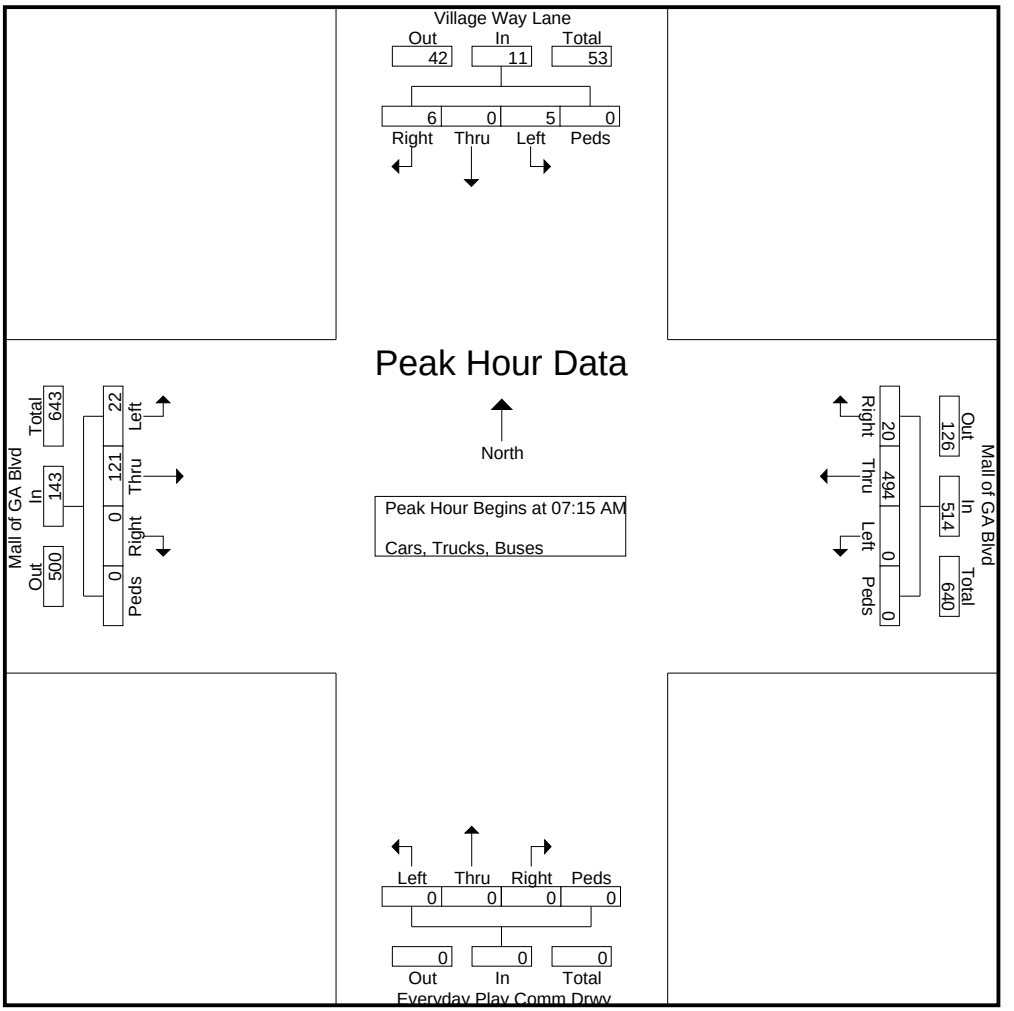
TMC Data
Mall of GA Blvd @ Village Way Lane

7-9am I 4.30-6.30pm

File Name : 38080005
Site Code : 38080005
Start Date : 3/22/2016

	Everyday Play Comm Drwy Northbound					Village Way Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:15 AM																					
07:15 AM	0	0	0	0	0	0	0	0	0	0	4	18	0	0	22	0	127	2	0	129	151
07:30 AM	0	0	0	0	0	2	0	0	0	2	2	31	0	0	33	0	**146**	**7**	0	**153**	**188**
07:45 AM	0	0	0	0	0	**3**	0	2	0	**5**	**8**	**38**	0	0	**46**	0	118	4	0	122	173
08:00 AM	0	0	0	0	0	0	0	**4**	0	4	8	34	0	0	42	0	103	7	0	110	156
Total Volume	0	0	0	0	0	5	0	6	0	11	22	121	0	0	143	0	494	20	0	514	668
% App. Total	0	0	0	0		45.5	0	54.5	0		15.4	84.6	0	0		0	96.1	3.9	0		
PHF	.000	.000	.000	.000	.000	.417	.000	.375	.000	.550	.688	.796	.000	.000	.777	.000	.846	.714	.000	.840	.888



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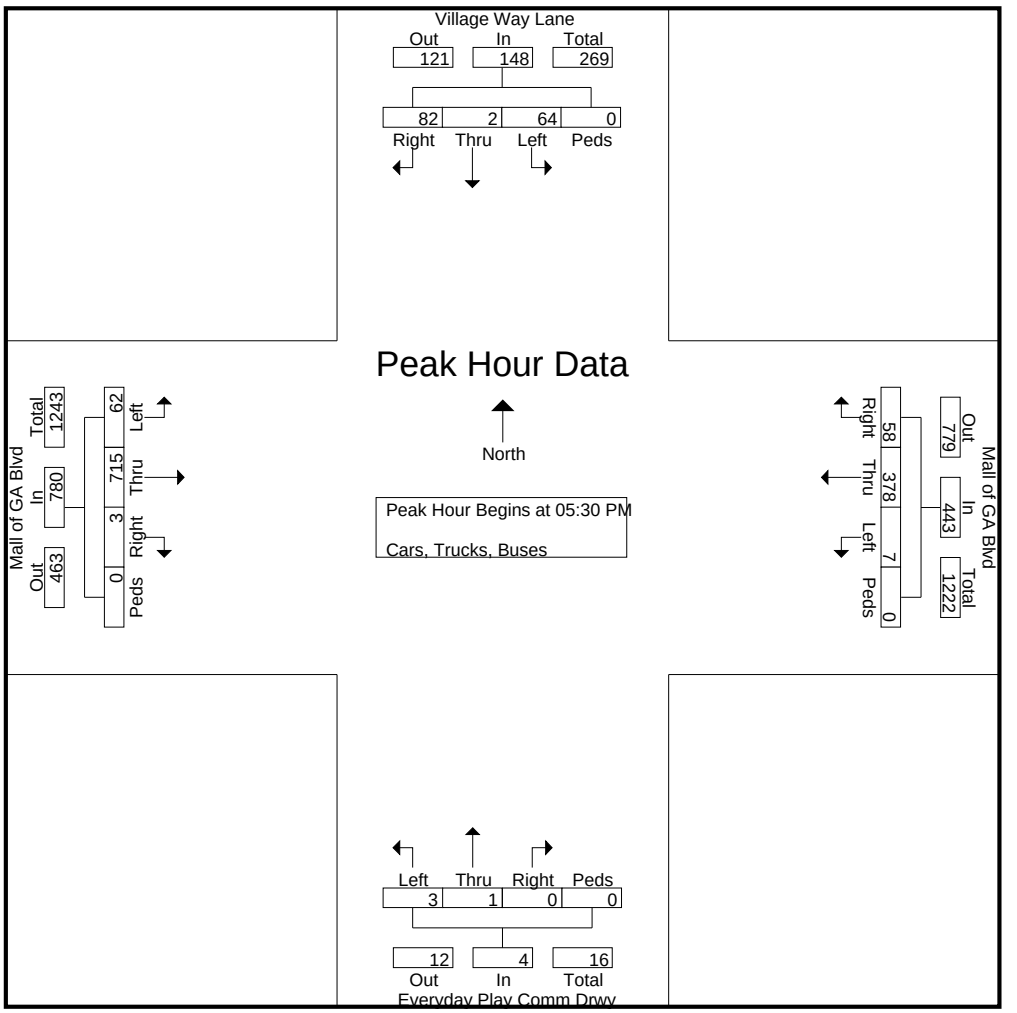
TMC Data
Mall of GA Blvd @ Village Way Lane

7-9am I 4.30-6.30pm

File Name : 38080005
Site Code : 38080005
Start Date : 3/22/2016
Page No : 3

	Everyday Play Comm Drwy Northbound					Village Way Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:30 PM																					
05:30 PM	**1**	0	0	0	1	14	0	14	0	28	15	172	**1**	0	188	**3**	70	15	0	88	305
05:45 PM	0	0	0	0	0	16	0	22	0	38	**17**	**188**	1	0	**206**	1	103	13	0	117	**361**
06:00 PM	1	**1**	0	0	**2**	**22**	**2**	**23**	0	**47**	15	179	0	0	194	1	101	**16**	0	118	361
06:15 PM	1	0	0	0	1	12	0	23	0	35	15	176	1	0	192	2	**104**	14	0	**120**	348
Total Volume	3	1	0	0	4	64	2	82	0	148	62	715	3	0	780	7	378	58	0	443	1375
% App. Total	75	25	0	0		43.2	1.4	55.4	0		7.9	91.7	0.4	0		1.6	85.3	13.1	0		
PHF	.750	.250	.000	.000	.500	.727	.250	.891	.000	.787	.912	.951	.750	.000	.947	.583	.909	.906	.000	.923	.952



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TMC Data
Mall of GA Blvd @ Village Way Lane

3pm - 6pm Sat

File Name : 38080005-Sat
Site Code : 38080005
Start Date : 3/12/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Everyday Play Comm Drwy Northbound					Village Way Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	2	1	0	0	3	30	1	45	0	76	30	182	2	0	214	7	127	18	0	152	445
03:15 PM	7	0	2	0	9	23	0	54	0	77	27	164	5	0	196	8	136	22	0	166	448
03:30 PM	8	0	0	0	8	26	1	46	0	73	34	168	4	0	206	12	127	26	0	165	452
03:45 PM	5	3	1	0	9	21	0	39	0	60	38	163	6	0	207	10	125	24	0	159	435
Total	22	4	3	0	29	100	2	184	0	286	129	677	17	0	823	37	515	90	0	642	1780
04:00 PM	7	1	1	0	9	26	0	32	0	58	33	161	7	0	201	7	128	21	0	156	424
04:15 PM	8	3	3	0	14	25	0	60	0	85	31	171	1	0	203	9	130	20	0	159	461
04:30 PM	10	0	2	0	12	28	0	52	0	80	43	167	3	0	213	9	128	24	0	161	466
04:45 PM	3	2	2	0	7	23	0	46	0	69	39	162	0	0	201	1	116	25	0	142	419
Total	28	6	8	0	42	102	0	190	0	292	146	661	11	0	818	26	502	90	0	618	1770
05:00 PM	5	1	2	0	8	25	1	52	0	78	37	167	1	0	205	7	115	25	0	147	438
05:15 PM	0	0	0	0	0	37	0	45	0	82	37	166	3	0	206	10	142	23	0	175	463
05:30 PM	4	0	2	0	6	29	0	45	0	74	37	146	1	0	184	7	110	26	0	143	407
05:45 PM	4	2	0	0	6	26	0	35	0	61	30	128	0	0	158	6	116	19	0	141	366
Total	13	3	4	0	20	117	1	177	0	295	141	607	5	0	753	30	483	93	0	606	1674
Grand Total	63	13	15	0	91	319	3	551	0	873	416	1945	33	0	2394	93	1500	273	0	1866	5224
Apprch %	69.2	14.3	16.5	0		36.5	0.3	63.1	0		17.4	81.2	1.4	0		5	80.4	14.6	0		
Total %	1.2	0.2	0.3	0	1.7	6.1	0.1	10.5	0	16.7	8	37.2	0.6	0	45.8	1.8	28.7	5.2	0	35.7	

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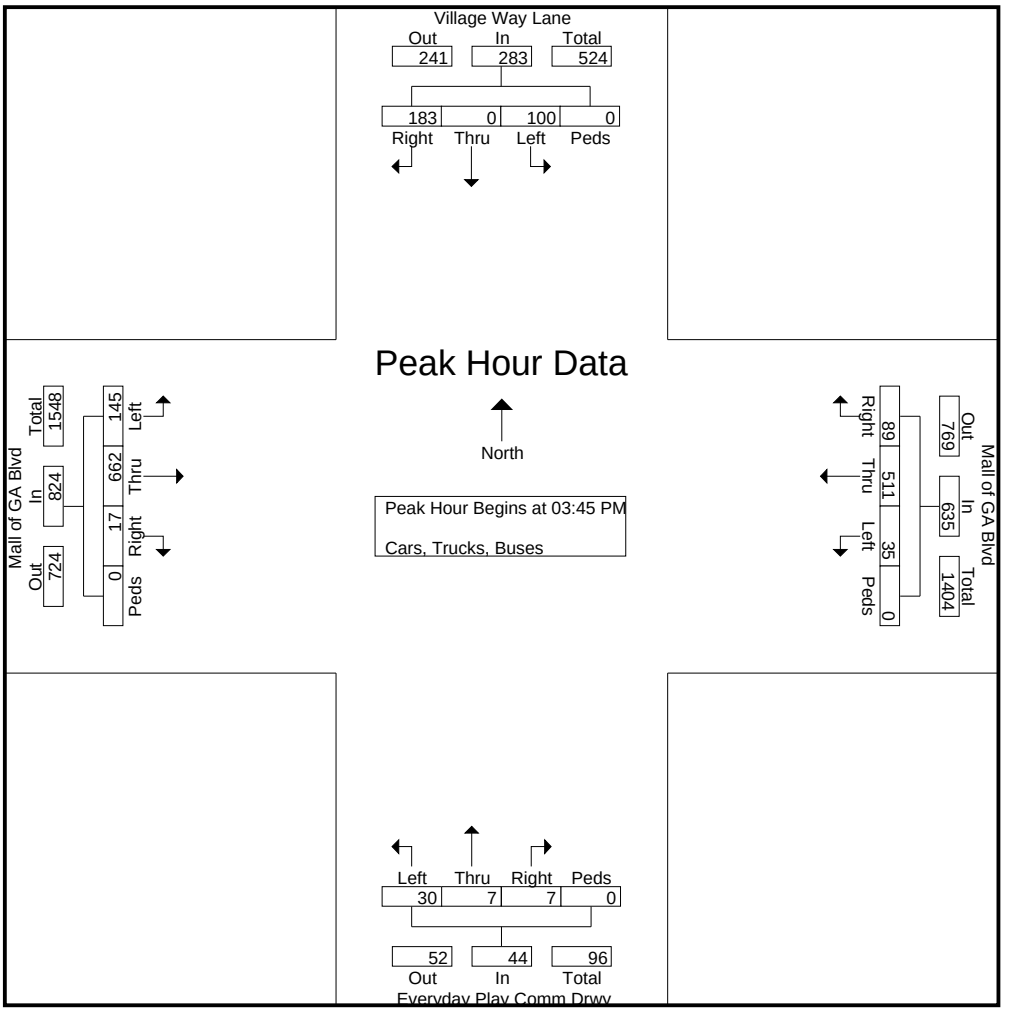
TMC Data
Mall of GA Blvd @ Village Way Lane

3pm - 6pm Sat

File Name : 38080005-Sat
Site Code : 38080005
Start Date : 3/12/2016
Page No : 2

	Everyday Play Comm Drwy Northbound					Village Way Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	5	**3**	1	0	9	21	0	39	0	60	38	163	6	0	207	**10**	125	**24**	0	159	435
04:00 PM	7	1	1	0	9	26	0	32	0	58	33	161	**7**	0	201	7	128	21	0	156	424
04:15 PM	8	3	**3**	0	**14**	25	0	**60**	0	**85**	31	**171**	1	0	203	9	**130**	20	0	159	461
04:30 PM	**10**	0	2	0	12	**28**	0	52	0	80	**43**	167	3	0	**213**	9	128	24	0	**161**	**466**
Total Volume	30	7	7	0	44	100	0	183	0	283	145	662	17	0	824	35	511	89	0	635	1786
% App. Total	68.2	15.9	15.9	0		35.3	0	64.7	0		17.6	80.3	2.1	0		5.5	80.5	14	0		
PHF	.750	.583	.583	.000	.786	.893	.000	.763	.000	.832	.843	.968	.607	.000	.967	.875	.983	.927	.000	.986	.958



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TMC Data
Mall of GA Blvd @ Trail Path Lane

7-9am I 4.30-6.30pm

File Name : 38080006
Site Code : 38080006
Start Date : 3/22/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Georgia Leisure Comm Drwy Northbound					Trail Path Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	18	0	0	20	0	122	1	0	123	143
07:15 AM	0	0	1	0	1	1	0	1	0	2	2	22	0	0	24	0	124	1	0	125	152
07:30 AM	2	0	0	0	2	0	0	1	0	1	0	26	0	0	26	1	157	4	0	162	191
07:45 AM	0	0	0	0	0	1	0	1	0	2	4	38	0	0	42	1	119	4	0	124	168
Total	2	0	1	0	3	2	0	3	0	5	8	104	0	0	112	2	522	10	0	534	654
08:00 AM	1	0	0	0	1	2	0	0	0	2	4	28	0	0	32	2	111	1	0	114	149
08:15 AM	1	0	0	0	1	1	0	2	0	3	3	33	0	0	36	0	123	2	0	125	165
08:30 AM	1	0	0	0	1	0	1	0	0	1	1	38	0	0	39	0	123	3	0	126	167
08:45 AM	1	1	2	0	4	0	0	0	0	0	4	25	0	0	29	4	97	5	0	106	139
Total	4	1	2	0	7	3	1	2	0	6	12	124	0	0	136	6	454	11	0	471	620
*** BREAK ***																					
04:30 PM	1	0	1	0	2	17	0	4	0	21	8	201	0	0	209	2	89	21	0	112	344
04:45 PM	0	0	1	0	1	16	1	5	0	22	8	179	0	0	187	4	75	14	0	93	303
Total	1	0	2	0	3	33	1	9	0	43	16	380	0	0	396	6	164	35	0	205	647
05:00 PM	1	0	0	0	1	7	0	14	0	21	4	205	0	0	209	5	88	13	0	106	337
05:15 PM	0	0	2	0	2	14	0	12	0	26	12	207	0	0	219	3	71	23	0	97	344
05:30 PM	0	0	2	0	2	13	0	12	0	25	6	220	2	0	228	3	107	12	0	122	377
05:45 PM	1	0	2	0	3	12	0	8	0	20	6	197	0	0	203	1	86	9	0	96	322
Total	2	0	6	0	8	46	0	46	0	92	28	829	2	0	859	12	352	57	0	421	1380
06:00 PM	4	0	1	0	5	8	2	10	0	20	5	168	2	0	175	2	104	14	0	120	320
06:15 PM	3	0	1	0	4	13	0	14	0	27	3	179	0	0	182	3	100	15	0	118	331
Grand Total	16	1	13	0	30	105	4	84	0	193	72	1784	4	0	1860	31	1696	142	0	1869	3952
Apprch %	53.3	3.3	43.3	0		54.4	2.1	43.5	0		3.9	95.9	0.2	0		1.7	90.7	7.6	0		
Total %	0.4	0	0.3	0	0.8	2.7	0.1	2.1	0	4.9	1.8	45.1	0.1	0	47.1	0.8	42.9	3.6	0	47.3	

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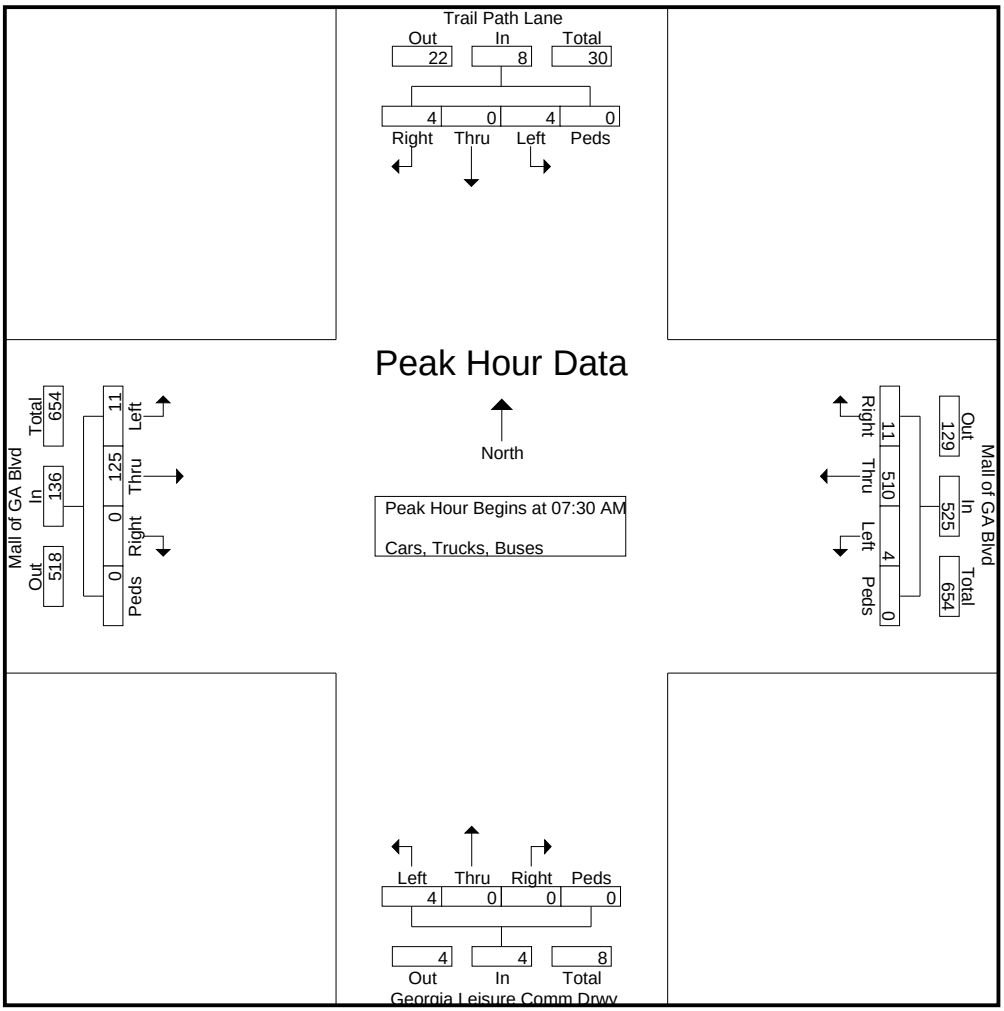
TMC Data
Mall of GA Blvd @ Trail Path Lane

7-9am I 4.30-6.30pm

File Name : 38080006
Site Code : 38080006
Start Date : 3/22/2016
Page No : 2

	Georgia Leisure Comm Drwy Northbound					Trail Path Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:30 AM																					
07:30 AM	**2**	0	0	0	**2**	0	0	1	0	1	0	26	0	0	26	1	**157**	**4**	0	**162**	**191**
07:45 AM	0	0	0	0	0	1	0	1	0	2	**4**	**38**	0	0	**42**	1	119	4	0	124	168
08:00 AM	1	0	0	0	1	**2**	0	0	0	2	4	28	0	0	32	**2**	111	1	0	114	149
08:15 AM	1	0	0	0	1	1	0	**2**	0	**3**	3	33	0	0	36	0	123	2	0	125	165
Total Volume	4	0	0	0	4	4	0	4	0	8	11	125	0	0	136	4	510	11	0	525	673
% App. Total	100	0	0	0		50	0	50	0		8.1	91.9	0	0		0.8	97.1	2.1	0		
PHF	.500	.000	.000	.000	.500	.500	.000	.500	.000	.667	.688	.822	.000	.000	.810	.500	.812	.688	.000	.810	.881



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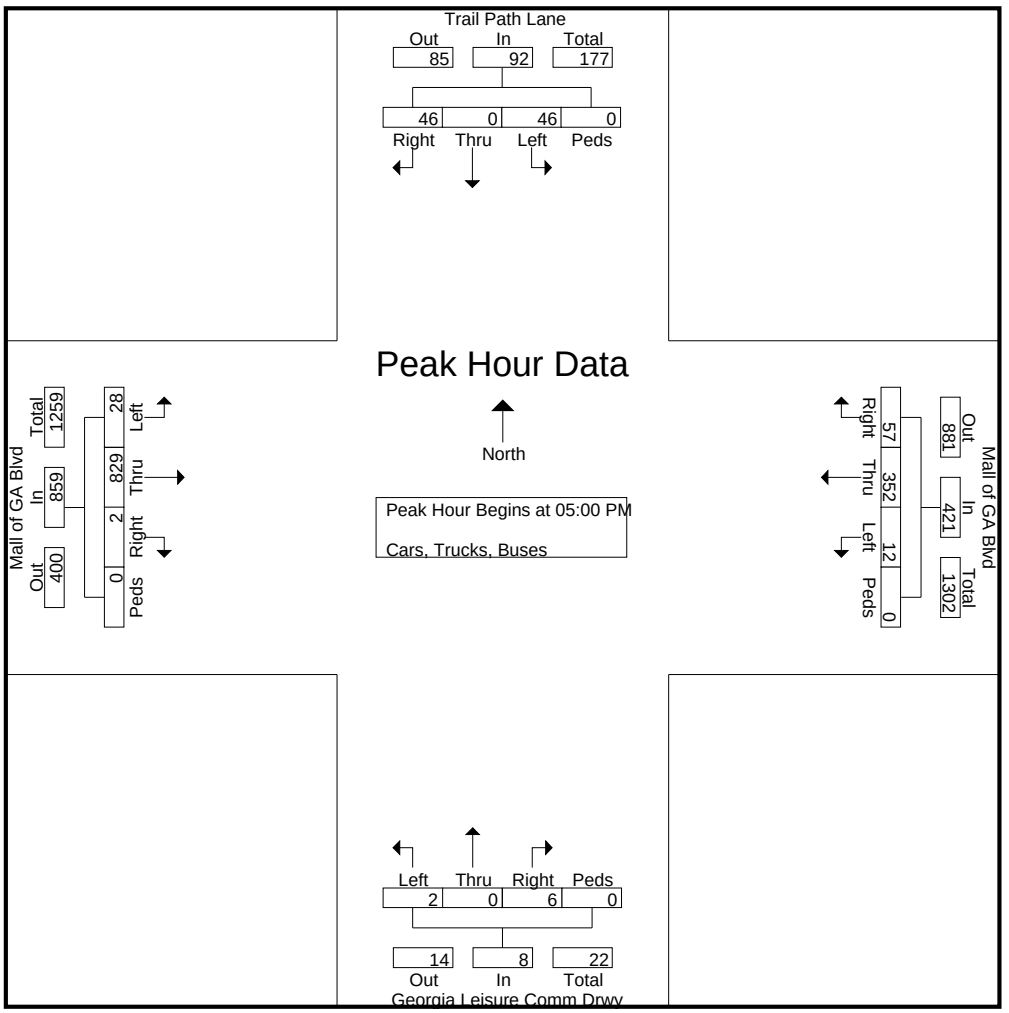
TMC Data
Mall of GA Blvd @ Trail Path Lane

7-9am I 4.30-6.30pm

File Name : 38080006
Site Code : 38080006
Start Date : 3/22/2016
Page No : 3

	Georgia Leisure Comm Drwy Northbound					Trail Path Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**1**	0	0	0	1	7	0	**14**	0	21	4	205	0	0	209	**5**	88	13	0	106	337
05:15 PM	0	0	**2**	0	2	**14**	0	12	0	**26**	**12**	207	0	0	219	3	71	**23**	0	97	344
05:30 PM	0	0	2	0	2	13	0	12	0	25	6	**220**	**2**	0	**228**	3	**107**	12	0	**122**	**377**
05:45 PM	1	0	2	0	**3**	12	0	8	0	20	6	197	0	0	203	1	86	9	0	96	322
Total Volume	2	0	6	0	8	46	0	46	0	92	28	829	2	0	859	12	352	57	0	421	1380
% App. Total	25	0	75	0		50	0	50	0		3.3	96.5	0.2	0		2.9	83.6	13.5	0		
PHF	.500	.000	.750	.000	.667	.821	.000	.821	.000	.885	.583	.942	.250	.000	.942	.600	.822	.620	.000	.863	.915



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TMC Data
Mall of GA Blvd @ Trail Path Lane

3pm - 6pm Sat

File Name : 38080006-Sat
Site Code : 38080006
Start Date : 3/12/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Georgia Leisure Comm Drwy Northbound					Trail Path Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	2	0	5	0	7	27	1	32	0	60	22	173	0	0	195	3	121	25	0	149	411
03:15 PM	2	0	1	0	3	32	1	35	0	68	21	177	1	0	199	3	127	31	0	161	431
03:30 PM	3	2	4	0	9	29	0	25	0	54	17	182	0	0	199	9	124	32	0	165	427
03:45 PM	1	1	2	0	4	22	1	27	0	50	16	184	2	0	202	4	122	32	0	158	414
Total	8	3	12	0	23	110	3	119	0	232	76	716	3	0	795	19	494	120	0	633	1683
04:00 PM	3	0	3	0	6	34	0	25	0	59	23	193	1	0	217	0	125	19	0	144	426
04:15 PM	0	0	1	0	1	34	1	42	0	77	17	175	1	0	193	1	123	31	0	155	426
04:30 PM	2	2	0	0	4	24	0	40	0	64	15	179	3	0	197	2	118	40	0	160	425
04:45 PM	1	0	1	0	2	29	2	37	0	68	22	173	0	0	195	8	123	31	0	162	427
Total	6	2	5	0	13	121	3	144	0	268	77	720	5	0	802	11	489	121	0	621	1704
05:00 PM	1	1	2	0	4	31	0	32	0	63	14	175	1	0	190	0	121	33	0	154	411
05:15 PM	0	0	3	0	3	29	1	23	0	53	14	177	0	0	191	6	117	36	0	159	406
05:30 PM	3	0	3	0	6	23	2	34	0	59	13	175	1	0	189	2	109	28	0	139	393
05:45 PM	2	1	1	0	4	28	1	44	0	73	15	171	0	0	186	4	106	33	0	143	406
Total	6	2	9	0	17	111	4	133	0	248	56	698	2	0	756	12	453	130	0	595	1616
Grand Total	20	7	26	0	53	342	10	396	0	748	209	2134	10	0	2353	42	1436	371	0	1849	5003
Apprch %	37.7	13.2	49.1	0		45.7	1.3	52.9	0		8.9	90.7	0.4	0		2.3	77.7	20.1	0		
Total %	0.4	0.1	0.5	0	1.1	6.8	0.2	7.9	0	15	4.2	42.7	0.2	0	47	0.8	28.7	7.4	0	37	

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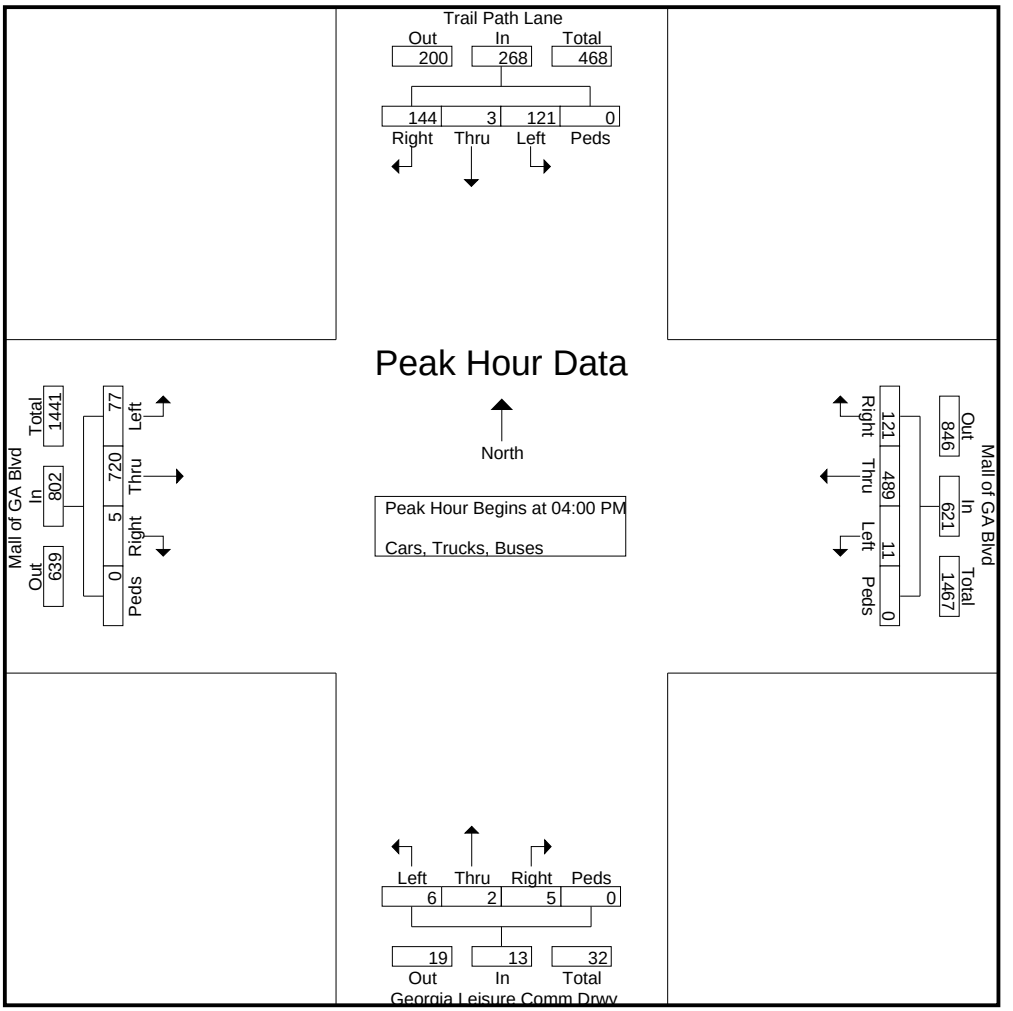
TMC Data
Mall of GA Blvd @ Trail Path Lane

3pm - 6pm Sat

File Name : 38080006-Sat
Site Code : 38080006
Start Date : 3/12/2016
Page No : 2

	Georgia Leisure Comm Drwy Northbound					Trail Path Lane Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**3**	0	**3**	0	**6**	**34**	0	25	0	59	**23**	**193**	1	0	**217**	0	**125**	19	0	144	426
04:15 PM	0	0	1	0	1	34	1	**42**	0	**77**	17	175	1	0	193	1	123	31	0	155	426
04:30 PM	2	**2**	0	0	4	24	0	40	0	64	15	179	**3**	0	197	2	118	**40**	0	160	425
04:45 PM	1	0	1	0	2	29	**2**	37	0	68	22	173	0	0	195	**8**	123	31	0	**162**	**427**
Total Volume	6	2	5	0	13	121	3	144	0	268	77	720	5	0	802	11	489	121	0	621	1704
% App. Total	46.2	15.4	38.5	0		45.1	1.1	53.7	0		9.6	89.8	0.6	0		1.8	78.7	19.5	0		
PHF	.500	.250	.417	.000	.542	.890	.375	.857	.000	.870	.837	.933	.417	.000	.924	.344	.978	.756	.000	.958	.998



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TMC Data
Mall of GA Blvd @ Appaloosa Lane

7-9am I 4.30-6.30pm

File Name : 38080007
Site Code : 38080007
Start Date : 3/22/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Appaloosa Lane Northbound					Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	14	0	10	0	24	0	0	0	0	0	0	14	3	0	17	13	113	0	0	126	167
07:15 AM	8	0	10	0	18	0	0	0	0	0	0	18	6	0	24	8	119	0	0	127	169
07:30 AM	18	0	26	0	44	0	0	0	0	0	0	22	4	0	26	7	145	0	0	152	222
07:45 AM	17	0	22	0	39	0	0	0	0	0	0	37	2	0	39	9	110	0	0	119	197
Total	57	0	68	0	125	0	0	0	0	0	0	91	15	0	106	37	487	0	0	524	755
08:00 AM	13	0	14	0	27	0	0	0	0	0	0	29	1	0	30	14	109	0	0	123	180
08:15 AM	13	0	12	0	25	0	0	0	0	0	0	31	3	0	34	15	114	0	0	129	188
08:30 AM	10	0	11	0	21	0	0	0	0	0	0	34	3	0	37	4	116	0	0	120	178
08:45 AM	12	0	9	0	21	0	0	0	0	0	0	30	0	0	30	9	89	0	0	98	149
Total	48	0	46	0	94	0	0	0	0	0	0	124	7	0	131	42	428	0	0	470	695
*** BREAK ***																					
04:30 PM	19	0	11	0	30	0	0	0	0	0	0	195	17	0	212	18	92	0	0	110	352
04:45 PM	8	0	14	0	22	0	0	0	0	0	0	199	12	0	211	17	90	0	0	107	340
Total	27	0	25	0	52	0	0	0	0	0	0	394	29	0	423	35	182	0	0	217	692
05:00 PM	15	0	7	0	22	0	0	0	0	0	0	196	17	0	213	19	90	0	0	109	344
05:15 PM	9	0	10	0	19	0	0	0	0	0	0	204	13	0	217	19	90	0	0	109	345
05:30 PM	17	0	11	0	28	0	0	0	0	0	0	207	18	0	225	20	103	0	0	123	376
05:45 PM	11	0	9	0	20	0	0	0	0	0	0	194	16	0	210	19	89	0	0	108	338
Total	52	0	37	0	89	0	0	0	0	0	0	801	64	0	865	77	372	0	0	449	1403
06:00 PM	16	0	10	0	26	0	0	0	0	0	0	182	15	0	197	22	98	0	0	120	343
06:15 PM	9	0	15	0	24	0	0	0	0	0	0	170	17	0	187	22	107	0	0	129	340
Grand Total	209	0	201	0	410	0	0	0	0	0	0	1762	147	0	1909	235	1674	0	0	1909	4228
Apprch %	51	0	49	0		0	0	0	0		0	92.3	7.7	0		12.3	87.7	0	0		
Total %	4.9	0	4.8	0	9.7	0	0	0	0	0	0	41.7	3.5	0	45.2	5.6	39.6	0	0	45.2	

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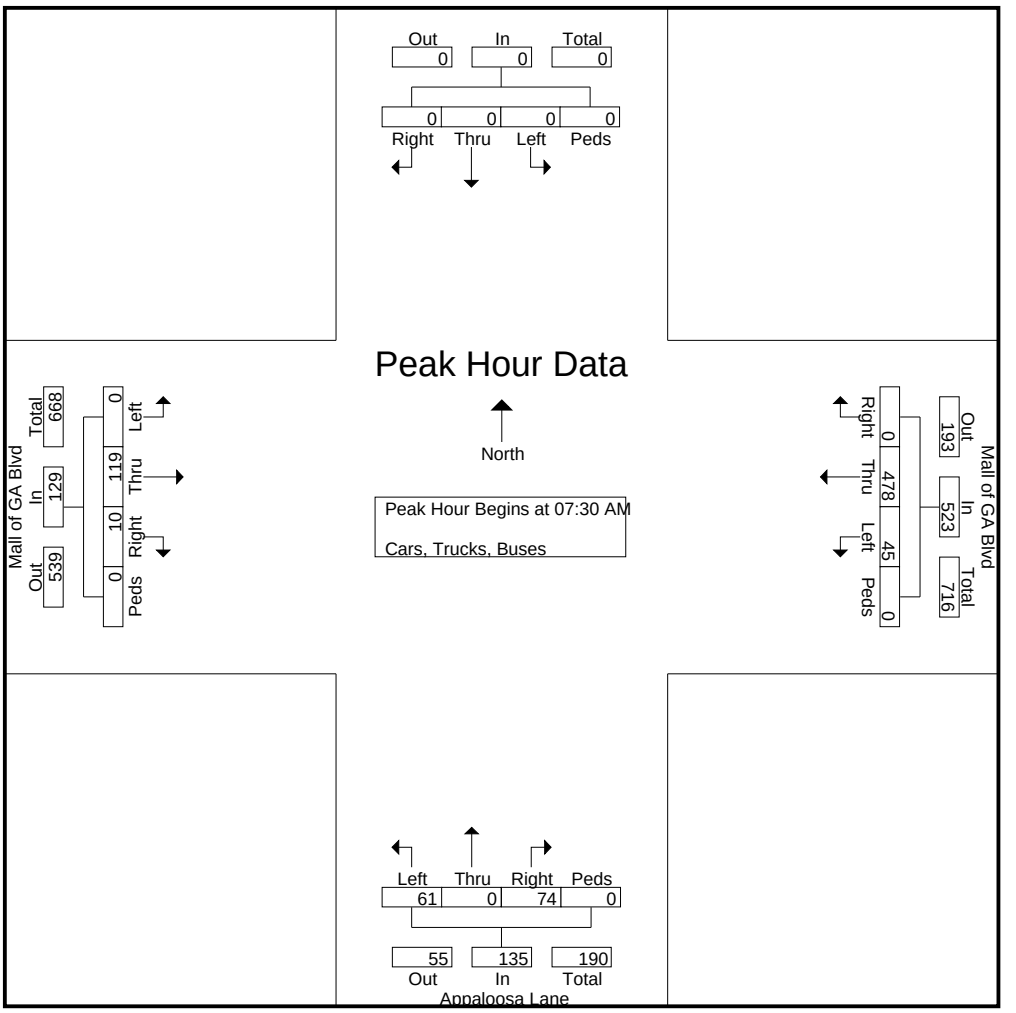
TMC Data
Mall of GA Blvd @ Appaloosa Lane

7-9am I 4.30-6.30pm

File Name : 38080007
Site Code : 38080007
Start Date : 3/22/2016
Page No : 2

	Appaloosa Lane Northbound					Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:30 AM																					
07:30 AM	**18**	0	**26**	0	**44**	0	0	0	0	0	0	22	**4**	0	26	7	**145**	0	0	**152**	**222**
07:45 AM	17	0	22	0	39	0	0	0	0	0	0	**37**	2	0	**39**	9	110	0	0	119	197
08:00 AM	13	0	14	0	27	0	0	0	0	0	0	29	1	0	30	14	109	0	0	123	180
08:15 AM	13	0	12	0	25	0	0	0	0	0	0	31	3	0	34	**15**	114	0	0	129	188
Total Volume	61	0	74	0	135	0	0	0	0	0	0	119	10	0	129	45	478	0	0	523	787
% App. Total	45.2	0	54.8	0		0	0	0	0		0	92.2	7.8	0		8.6	91.4	0	0		
PHF	.847	.000	.712	.000	.767	.000	.000	.000	.000	.000	.000	.804	.625	.000	.827	.750	.824	.000	.000	.860	.886



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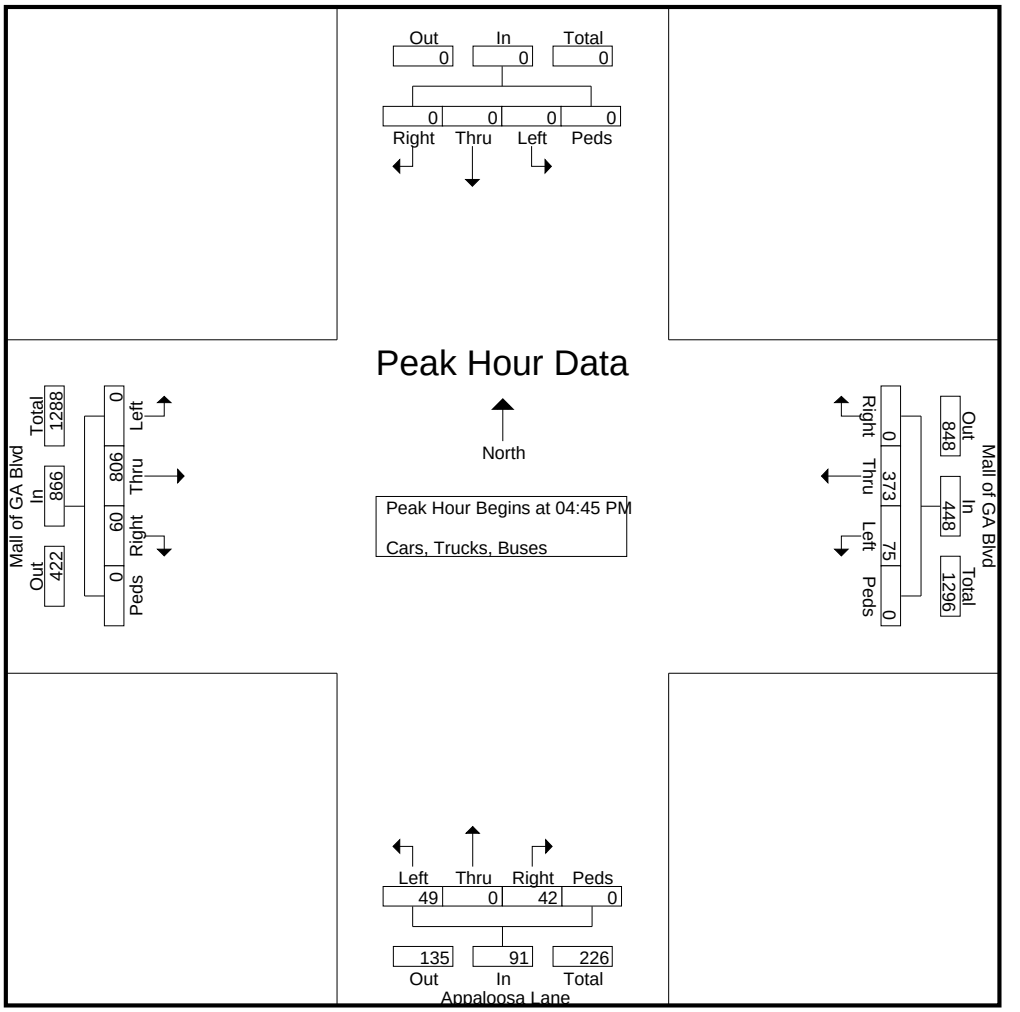
TMC Data
Mall of GA Blvd @ Appaloosa Lane

7-9am I 4.30-6.30pm

File Name : 38080007
Site Code : 38080007
Start Date : 3/22/2016
Page No : 3

	Appaloosa Lane Northbound					Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	8	0	**14**	0	22	0	0	0	0	0	0	199	12	0	211	17	90	0	0	107	340
05:00 PM	15	0	7	0	22	0	0	0	0	0	0	196	17	0	213	19	90	0	0	109	344
05:15 PM	9	0	10	0	19	0	0	0	0	0	0	204	13	0	217	19	90	0	0	109	345
05:30 PM	**17**	0	11	0	**28**	0	0	0	0	0	0	**207**	**18**	0	**225**	**20**	**103**	0	0	**123**	**376**
Total Volume	49	0	42	0	91	0	0	0	0	0	0	806	60	0	866	75	373	0	0	448	1405
% App. Total	53.8	0	46.2	0		0	0	0	0		0	93.1	6.9	0		16.7	83.3	0	0		
PHF	.721	.000	.750	.000	.813	.000	.000	.000	.000	.000	.000	.973	.833	.000	.962	.938	.905	.000	.000	.911	.934



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TMC Data
Mall of GA Blvd @ Appaloosa Lane

3pm - 6pm Sat

File Name : 38080007-Sat
Site Code : 38080007
Start Date : 3/12/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Appaloosa Lane Northbound					Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	11	0	4	0	15	0	0	0	0	0	0	191	12	1	204	17	157	0	0	174	393
03:15 PM	16	0	12	0	28	0	0	0	0	0	0	193	10	0	203	14	153	0	0	167	398
03:30 PM	14	0	8	0	22	0	0	0	0	0	0	190	11	1	202	12	146	0	0	158	382
03:45 PM	10	0	6	0	16	0	0	0	0	0	0	195	13	2	210	14	139	0	0	153	379
Total	51	0	30	0	81	0	0	0	0	0	0	769	46	4	819	57	595	0	0	652	1552
04:00 PM	7	0	10	0	17	0	0	0	0	0	0	198	19	1	218	19	144	0	0	163	398
04:15 PM	14	0	7	0	21	0	0	0	0	0	0	204	15	1	220	20	148	0	0	168	409
04:30 PM	10	0	12	0	22	0	0	0	0	0	0	197	11	3	211	17	145	0	0	162	395
04:45 PM	9	0	5	0	14	0	0	0	0	0	0	206	7	1	214	19	137	0	0	156	384
Total	40	0	34	0	74	0	0	0	0	0	0	805	52	6	863	75	574	0	0	649	1586
05:00 PM	16	0	10	0	26	0	0	0	0	0	0	202	8	0	210	13	139	0	0	152	388
05:15 PM	10	0	5	0	15	0	0	0	0	0	0	207	7	0	214	12	136	0	0	148	377
05:30 PM	6	0	7	0	13	0	0	0	0	0	0	203	8	2	213	12	138	0	0	150	376
05:45 PM	3	0	6	0	9	0	0	0	0	0	0	197	7	1	205	13	135	0	0	148	362
Total	35	0	28	0	63	0	0	0	0	0	0	809	30	3	842	50	548	0	0	598	1503
Grand Total	126	0	92	0	218	0	0	0	0	0	0	2383	128	13	2524	182	1717	0	0	1899	4641
Apprch %	57.8	0	42.2	0		0	0	0	0		0	94.4	5.1	0.5		9.6	90.4	0	0		
Total %	2.7	0	2	0	4.7	0	0	0	0	0	0	51.3	2.8	0.3	54.4	3.9	37	0	0	40.9	

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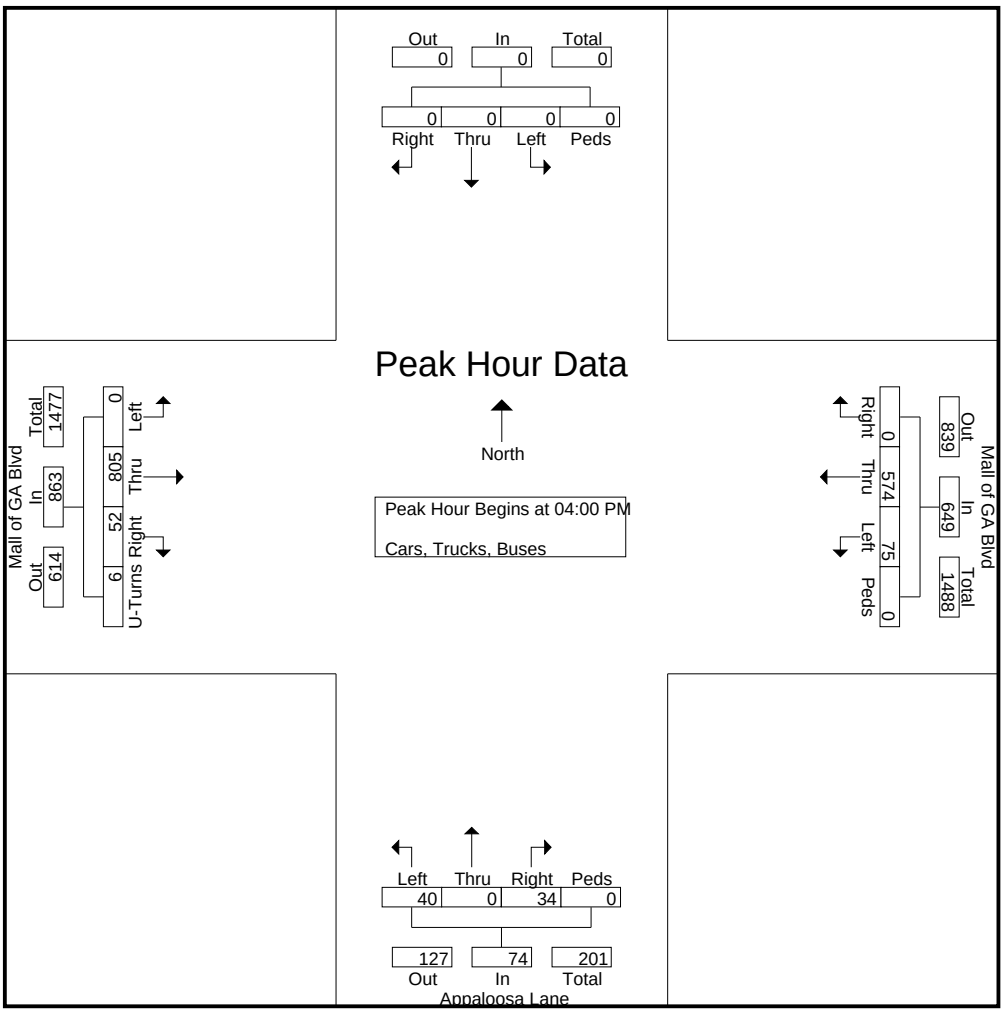
TMC Data
Mall of GA Blvd @ Appaloosa Lane

3pm - 6pm Sat

File Name : 38080007-Sat
Site Code : 38080007
Start Date : 3/12/2016
Page No : 2

	Appaloosa Lane Northbound					Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	7	0	10	0	17	0	0	0	0	0	0	198	**19**	1	218	19	144	0	0	163	398
04:15 PM	**14**	0	7	0	21	0	0	0	0	0	0	204	15	1	**220**	**20**	**148**	0	0	**168**	**409**
04:30 PM	10	0	**12**	0	**22**	0	0	0	0	0	0	197	11	**3**	211	17	145	0	0	162	395
04:45 PM	9	0	5	0	14	0	0	0	0	0	0	**206**	7	1	214	19	137	0	0	156	384
Total Volume	40	0	34	0	74	0	0	0	0	0	0	805	52	6	863	75	574	0	0	649	1586
% App. Total	54.1	0	45.9	0		0	0	0	0		0	93.3	6	0.7		11.6	88.4	0	0		
PHF	.714	.000	.708	.000	.841	.000	.000	.000	.000	.000	.000	.977	.684	.500	.981	.938	.970	.000	.000	.966	.969



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TMC Data
Mall of GA Blvd @
Woodward Crossing Blvd
7-9am I 4.30-6.30pm

File Name : 38080008
Site Code : 38080008
Start Date : 3/23/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Century Mill Creek Aparts Drwy Northbound					Woodward Crossing Blvd Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	13	4	6	0	23	1	1	5	0	7	7	17	1	0	25	4	103	8	0	115	170
07:15 AM	10	2	12	0	24	2	0	1	0	3	1	21	4	0	26	4	122	14	0	140	193
07:30 AM	13	4	14	0	31	3	1	0	0	4	4	44	5	0	53	6	136	16	0	158	246
07:45 AM	10	6	17	0	33	0	7	5	0	12	6	41	14	0	61	7	99	23	0	129	235
Total	46	16	49	0	111	6	9	11	0	26	18	123	24	0	165	21	460	61	0	542	844
08:00 AM	13	5	12	0	30	4	1	3	0	8	7	36	8	0	51	10	100	20	0	130	219
08:15 AM	11	3	4	0	18	1	3	1	0	5	5	32	5	0	42	5	101	19	0	125	190
08:30 AM	6	2	5	0	13	7	4	1	0	12	7	35	3	0	45	9	114	17	0	140	210
08:45 AM	8	2	8	0	18	11	3	5	0	19	6	29	5	0	40	6	99	17	0	122	199
Total	38	12	29	0	79	23	11	10	0	44	25	132	21	0	178	30	414	73	0	517	818
*** BREAK ***																					
04:30 PM	5	1	5	0	11	61	6	17	0	84	16	172	9	0	197	7	79	42	0	128	420
04:45 PM	3	3	13	0	19	65	5	14	0	84	18	175	14	0	207	9	83	46	0	138	448
Total	8	4	18	0	30	126	11	31	0	168	34	347	23	0	404	16	162	88	0	266	868
05:00 PM	7	3	7	0	17	67	3	11	0	81	15	186	4	0	205	11	86	53	0	150	453
05:15 PM	8	2	12	0	22	71	6	10	0	87	15	194	9	0	218	14	97	57	0	168	495
05:30 PM	6	5	4	0	15	69	7	12	0	88	13	190	7	0	210	15	102	52	0	169	482
05:45 PM	5	1	6	0	12	64	7	13	0	84	13	187	10	0	210	11	96	59	0	166	472
Total	26	11	29	0	66	271	23	46	0	340	56	757	30	0	843	51	381	221	0	653	1902
06:00 PM	11	3	14	0	28	66	9	15	0	90	17	156	10	0	183	13	93	56	0	162	463
06:15 PM	11	1	8	0	20	62	6	15	0	83	16	162	10	0	188	9	88	53	0	150	441
Grand Total	140	47	147	0	334	554	69	128	0	751	166	1677	118	0	1961	140	1598	552	0	2290	5336
Apprch %	41.9	14.1	44	0		73.8	9.2	17	0		8.5	85.5	6	0		6.1	69.8	24.1	0		
Total %	2.6	0.9	2.8	0	6.3	10.4	1.3	2.4	0	14.1	3.1	31.4	2.2	0	36.8	2.6	29.9	10.3	0	42.9	

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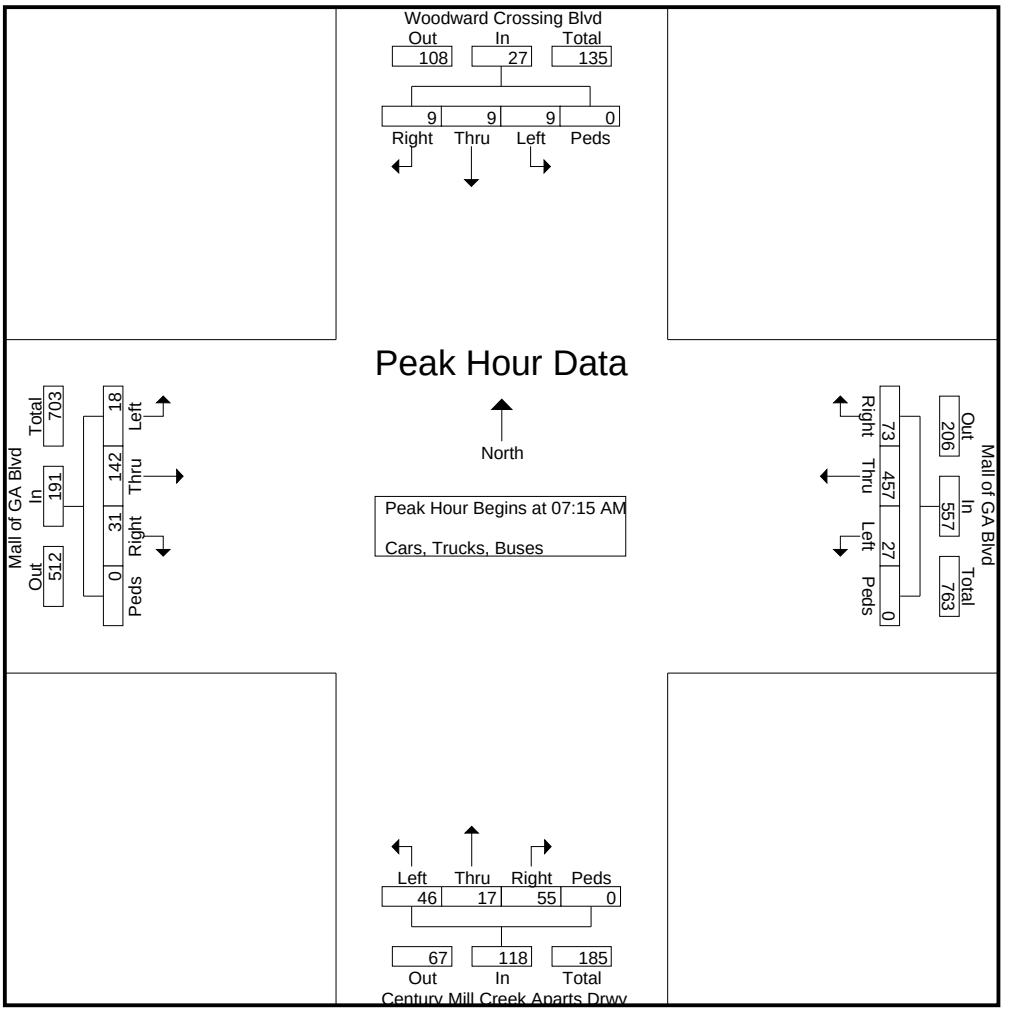
TMC Data
Mall of GA Blvd @
Woodward Crossing Blvd
7-9am I 4.30-6.30pm

File Name : 38080008
Site Code : 38080008
Start Date : 3/23/2016
Page No : 2

	Century Mill Creek Aparts Drwy Northbound					Woodward Crossing Blvd Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:15 AM																					
07:15 AM	10	2	12	0	24	2	0	1	0	3	1	21	4	0	26	4	122	14	0	140	193
07:30 AM	**13**	4	14	0	31	3	1	0	0	4	4	**44**	5	0	53	6	**136**	16	0	**158**	**246**
07:45 AM	10	**6**	**17**	0	**33**	0	**7**	**5**	0	**12**	6	41	**14**	0	**61**	7	99	**23**	0	129	235
08:00 AM	13	5	12	0	30	**4**	1	3	0	8	**7**	36	8	0	51	**10**	100	20	0	130	219
Total Volume	46	17	55	0	118	9	9	9	0	27	18	142	31	0	191	27	457	73	0	557	893
% App. Total	39	14.4	46.6	0		33.3	33.3	33.3	0		9.4	74.3	16.2	0		4.8	82	13.1	0		
PHF	.885	.708	.809	.000	.894	.563	.321	.450	.000	.563	.643	.807	.554	.000	.783	.675	.840	.793	.000	.881	.908



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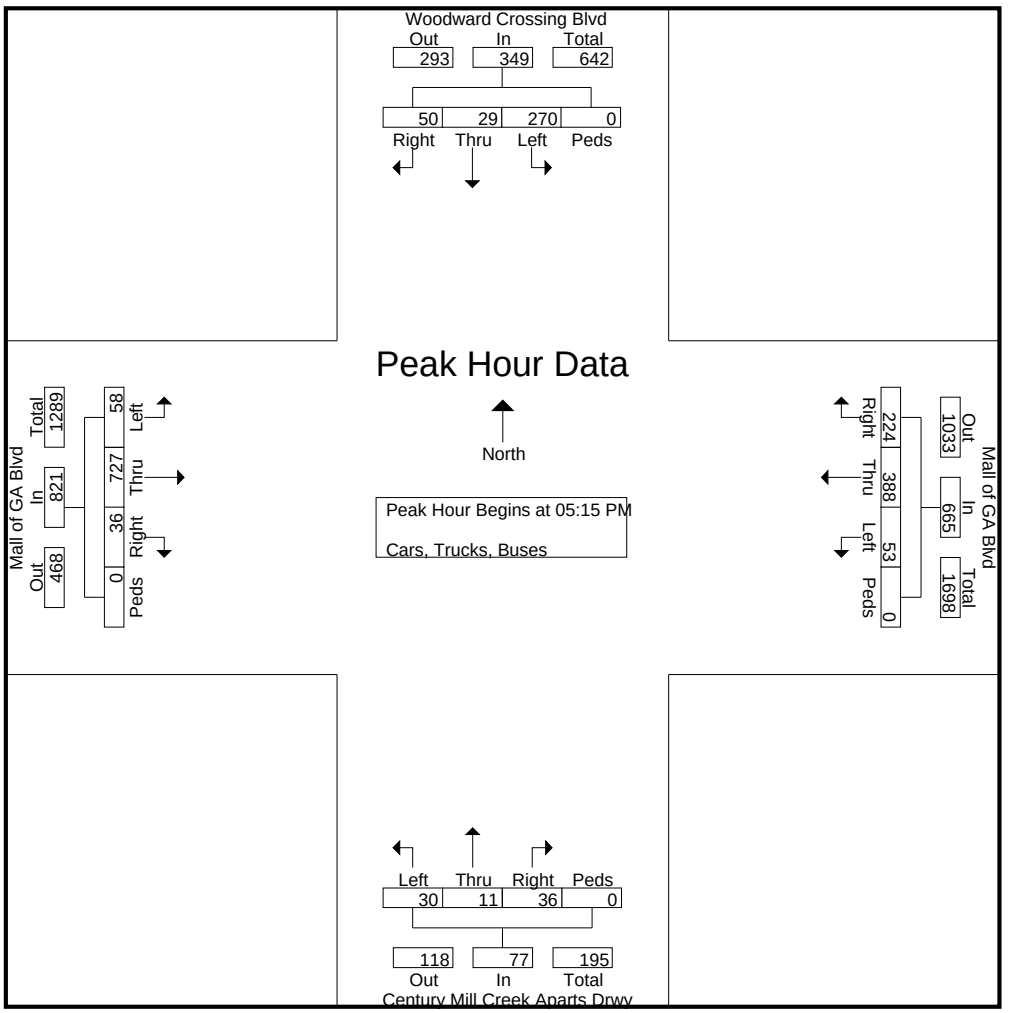
TMC Data
Mall of GA Blvd @
Woodward Crossing Blvd
7-9am I 4.30-6.30pm

File Name : 38080008
Site Code : 38080008
Start Date : 3/23/2016
Page No : 3

	Century Mill Creek Aparts Drwy Northbound					Woodward Crossing Blvd Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:15 PM																					
05:15 PM	8	2	12	0	22	**71**	6	10	0	87	15	**194**	9	0	**218**	14	97	57	0	168	**495**
05:30 PM	6	**5**	4	0	15	69	7	12	0	88	13	190	7	0	210	**15**	**102**	52	0	**169**	482
05:45 PM	5	1	6	0	12	64	7	13	0	84	13	187	**10**	0	210	11	96	**59**	0	166	472
06:00 PM	**11**	3	**14**	0	**28**	66	**9**	**15**	0	**90**	**17**	156	10	0	183	13	93	56	0	162	463
Total Volume	30	11	36	0	77	270	29	50	0	349	58	727	36	0	821	53	388	224	0	665	1912
% App. Total	39	14.3	46.8	0		77.4	8.3	14.3	0		7.1	88.6	4.4	0		8	58.3	33.7	0		
PHF	.682	.550	.643	.000	.688	.951	.806	.833	.000	.969	.853	.937	.900	.000	.942	.883	.951	.949	.000	.984	.966



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TMC Data
Mall of GA Blvd @
Woodward Crossing Blvd
3pm - 6pm Sat

File Name : 38080008-Sat
Site Code : 38080008
Start Date : 3/19/2016

Groups Printed- Cars, Trucks, Buses

	Century Mill Creek Aparts Drwy Northbound					Woodward Crossing Bllvd Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	2	1	3	0	6	107	3	16	0	126	48	153	5	0	206	5	141	80	0	226	564
03:15 PM	3	6	13	0	22	107	4	20	0	131	44	134	5	0	183	6	153	85	0	244	580
03:30 PM	3	4	5	0	12	99	2	20	0	121	41	166	7	0	214	5	136	73	0	214	561
03:45 PM	4	1	11	0	16	103	2	13	0	118	37	159	8	0	204	8	153	75	0	236	574
Total	12	12	32	0	56	416	11	69	0	496	170	612	25	0	807	24	583	313	0	920	2279
04:00 PM	7	5	8	0	20	105	3	13	0	121	32	157	7	0	196	6	140	73	0	219	556
04:15 PM	5	1	5	0	11	124	6	23	0	153	27	185	7	0	219	1	138	55	0	194	577
04:30 PM	2	3	7	0	12	89	2	26	0	117	23	185	4	0	212	3	140	68	0	211	552
04:45 PM	4	0	7	0	11	123	2	24	0	149	29	183	4	0	216	3	149	61	0	213	589
Total	18	9	27	0	54	441	13	86	0	540	111	710	22	0	843	13	567	257	0	837	2274
05:00 PM	3	3	7	0	13	102	3	20	0	125	36	185	8	0	229	2	124	59	0	185	552
05:15 PM	6	4	5	0	15	109	5	22	0	136	32	181	7	0	220	2	113	54	0	169	540
05:30 PM	8	3	10	0	21	90	2	14	0	106	27	174	5	0	206	6	128	49	0	183	516
05:45 PM	3	4	5	0	12	82	1	18	0	101	26	167	5	0	198	3	152	64	0	219	530
Total	20	14	27	0	61	383	11	74	0	468	121	707	25	0	853	13	517	226	0	756	2138
Grand Total	50	35	86	0	171	1240	35	229	0	1504	402	2029	72	0	2503	50	1667	796	0	2513	6691
Apprch %	29.2	20.5	50.3	0		82.4	2.3	15.2	0		16.1	81.1	2.9	0		2	66.3	31.7	0		
Total %	0.7	0.5	1.3	0	2.6	18.5	0.5	3.4	0	22.5	6	30.3	1.1	0	37.4	0.7	24.9	11.9	0	37.6	

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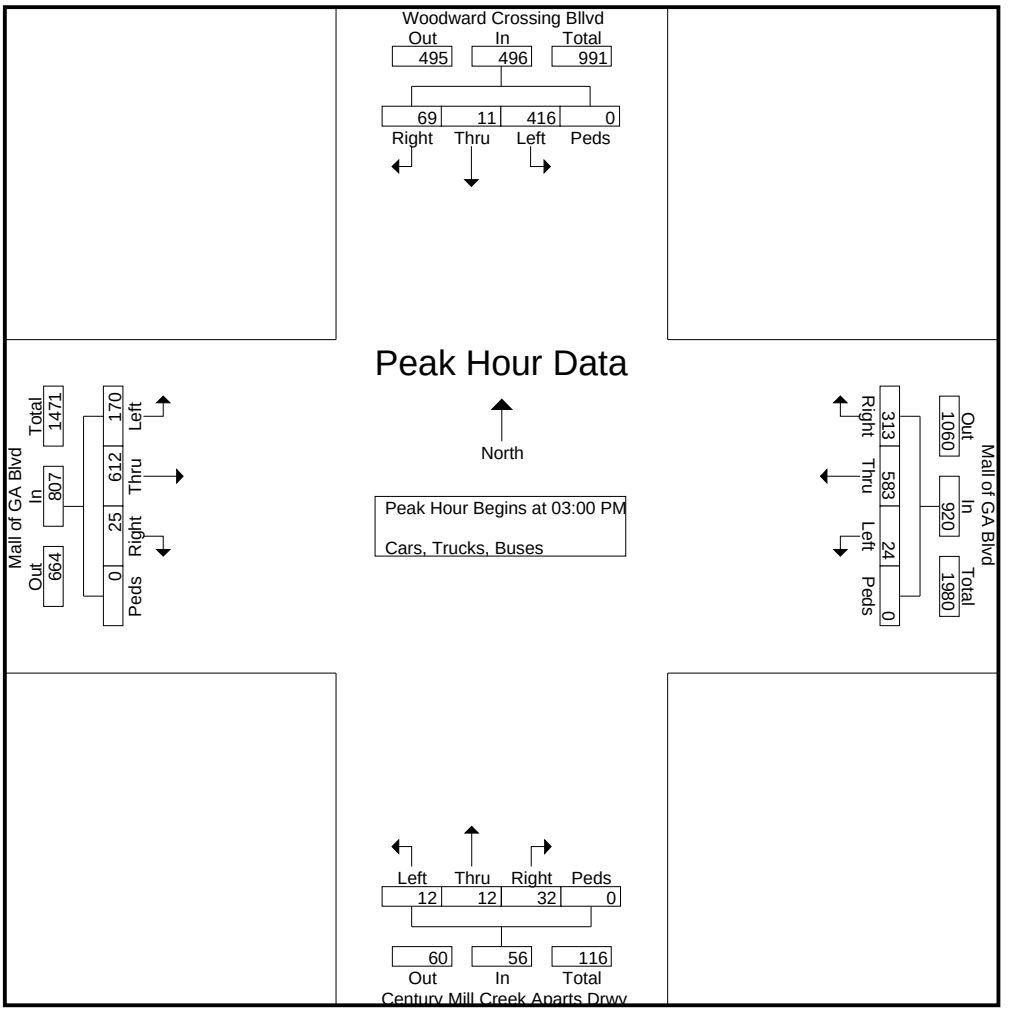
TMC Data
Mall of GA Blvd @
Woodward Crossing Blvd
3pm - 6pm Sat

File Name : 38080008-Sat
Site Code : 38080008
Start Date : 3/19/2016
Page No : 2

	Century Mill Creek Aparts Drwy Northbound					Woodward Crossing Bllvd Southbound					Mall of GA Blvd Eastbound					Mall of GA Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	2	1	3	0	6	**107**	3	16	0	126	**48**	153	5	0	206	5	141	80	0	226	564
03:15 PM	3	**6**	**13**	0	**22**	107	**4**	**20**	0	**131**	44	134	5	0	183	6	**153**	**85**	0	**244**	**580**
03:30 PM	3	4	5	0	12	99	2	20	0	121	41	**166**	7	0	**214**	5	136	73	0	214	561
03:45 PM	**4**	1	11	0	16	103	2	13	0	118	37	159	**8**	0	204	**8**	153	75	0	236	574
Total Volume	12	12	32	0	56	416	11	69	0	496	170	612	25	0	807	24	583	313	0	920	2279
% App. Total	21.4	21.4	57.1	0		83.9	2.2	13.9	0		21.1	75.8	3.1	0		2.6	63.4	34	0		
PHF	.750	.500	.615	.000	.636	.972	.688	.863	.000	.947	.885	.922	.781	.000	.943	.750	.953	.921	.000	.943	.982



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TMC Data
Gravel Springs Rd @ Mall of GA Blvd/
Cedar Glade Lane
7-9am I 4.30-6.30pm

File Name : 38080009
Site Code : 38080009
Start Date : 3/23/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Mall of GA Blvd Northbound					Cedar Glade Lane Southbound					Gravel Springs Rd (SR324) Eastbound					Gravel Springs Rd (SR324) Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	8	0	23	0	31	3	4	2	0	9	2	42	8	0	52	91	215	0	0	306	398
07:15 AM	8	1	22	0	31	2	6	6	0	14	3	63	17	0	83	120	232	2	0	354	482
07:30 AM	21	0	25	0	46	1	5	5	0	11	2	68	16	0	86	124	227	1	0	352	495
07:45 AM	19	3	32	0	54	3	3	9	0	15	3	41	14	0	58	119	208	1	0	328	455
Total	56	4	102	0	162	9	18	22	0	49	10	214	55	0	279	454	882	4	0	1340	1830
08:00 AM	22	3	36	0	61	5	3	3	0	11	2	62	15	0	79	119	202	1	0	322	473
08:15 AM	13	0	15	0	28	0	3	4	0	7	2	53	12	0	67	117	210	4	0	331	433
08:30 AM	14	1	31	0	46	2	4	4	0	10	1	57	15	0	73	107	176	1	0	284	413
08:45 AM	13	0	25	0	38	3	3	2	0	8	2	59	15	0	76	114	199	2	0	315	437
Total	62	4	107	0	173	10	13	13	0	36	7	231	57	0	295	457	787	8	0	1252	1756
*** BREAK ***																					
04:30 PM	31	3	184	0	218	2	2	2	0	6	1	207	33	0	241	109	110	1	0	220	685
04:45 PM	35	4	193	0	232	5	2	3	0	10	2	214	29	0	245	103	112	2	0	217	704
Total	66	7	377	0	450	7	4	5	0	16	3	421	62	0	486	212	222	3	0	437	1389
05:00 PM	42	5	210	0	257	2	3	4	0	9	0	230	32	0	262	97	117	2	0	216	744
05:15 PM	46	3	213	0	262	3	1	6	0	10	3	234	36	0	273	103	125	3	0	231	776
05:30 PM	38	3	206	0	247	2	2	4	0	8	1	237	39	0	277	109	122	3	0	234	766
05:45 PM	35	4	197	0	236	6	3	5	0	14	2	234	42	0	278	117	118	2	0	237	765
Total	161	15	826	0	1002	13	9	19	0	41	6	935	149	0	1090	426	482	10	0	918	3051
06:00 PM	37	5	185	0	227	2	3	6	0	11	2	225	39	0	266	112	109	2	0	223	727
06:15 PM	45	3	175	0	223	3	2	5	0	10	3	222	36	0	261	110	104	3	0	217	711
Grand Total	427	38	1772	0	2237	44	49	70	0	163	31	2248	398	0	2677	1771	2586	30	0	4387	9464
Apprch %	19.1	1.7	79.2	0		27	30.1	42.9	0		1.2	84	14.9	0		40.4	58.9	0.7	0		
Total %	4.5	0.4	18.7	0	23.6	0.5	0.5	0.7	0	1.7	0.3	23.8	4.2	0	28.3	18.7	27.3	0.3	0	46.4	

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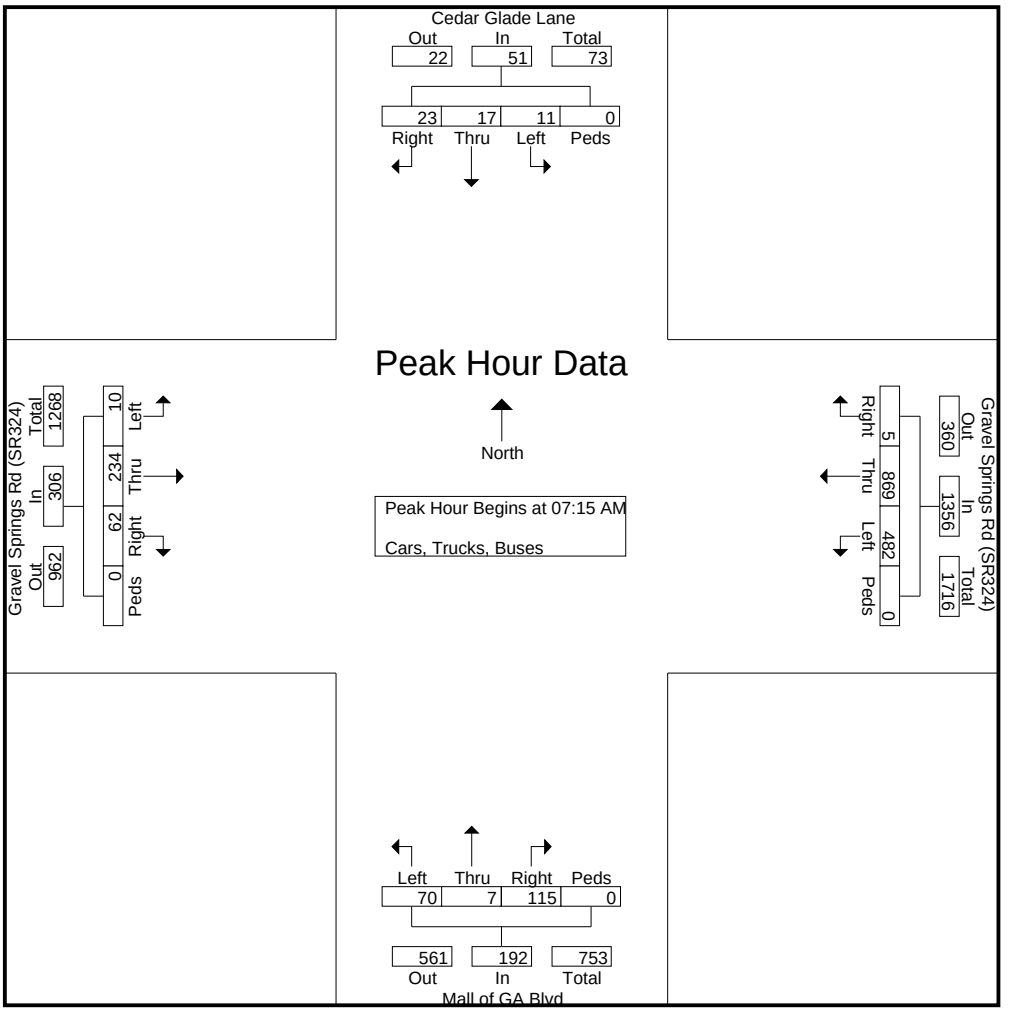
TMC Data
Gravel Springs Rd @ Mall of GA Blvd/
Cedar Glade Lane
7-9am I 4.30-6.30pm

File Name : 38080009
Site Code : 38080009
Start Date : 3/23/2016
Page No : 2

	Mall of GA Blvd Northbound					Cedar Glade Lane Southbound					Gravel Springs Rd (SR324) Eastbound					Gravel Springs Rd (SR324) Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:15 AM																					
07:15 AM	8	1	22	0	31	2	**6**	6	0	14	**3**	63	**17**	0	83	120	**232**	**2**	0	**354**	482
07:30 AM	21	0	25	0	46	1	5	5	0	11	2	**68**	16	0	**86**	**124**	227	1	0	352	**495**
07:45 AM	19	**3**	32	0	54	3	3	**9**	0	**15**	3	41	14	0	58	119	208	1	0	328	455
08:00 AM	**22**	3	**36**	0	**61**	**5**	3	3	0	11	2	62	15	0	79	119	202	1	0	322	473
Total Volume	70	7	115	0	192	11	17	23	0	51	10	234	62	0	306	482	869	5	0	1356	1905
% App. Total	36.5	3.6	59.9	0		21.6	33.3	45.1	0		3.3	76.5	20.3	0		35.5	64.1	0.4	0		
PHF	.795	.583	.799	.000	.787	.550	.708	.639	.000	.850	.833	.860	.912	.000	.890	.972	.936	.625	.000	.958	.962



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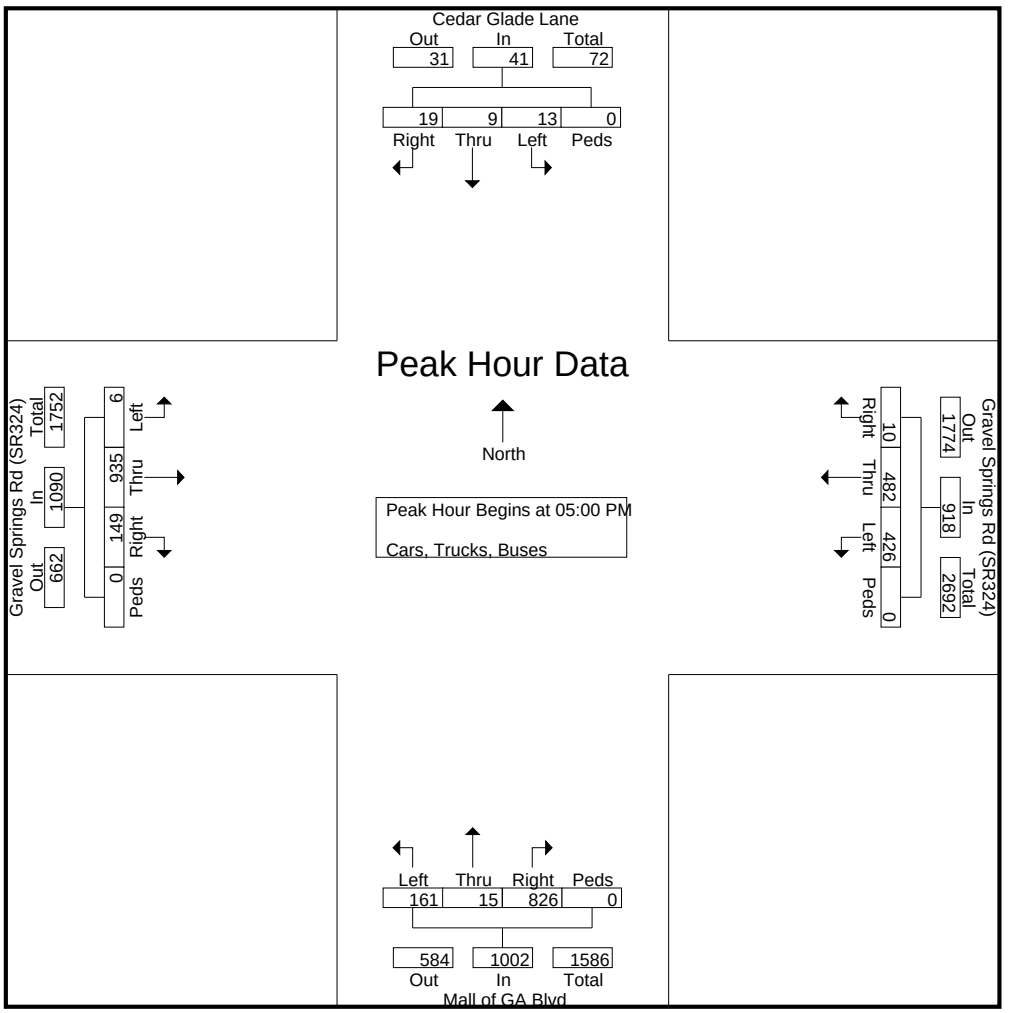
TMC Data
Gravel Springs Rd @ Mall of GA Blvd/
Cedar Glade Lane
7-9am I 4.30-6.30pm

File Name : 38080009
Site Code : 38080009
Start Date : 3/23/2016
Page No : 3

	Mall of GA Blvd Northbound					Cedar Glade Lane Southbound					Gravel Springs Rd (SR324) Eastbound					Gravel Springs Rd (SR324) Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	42	**5**	210	0	257	2	**3**	4	0	9	0	230	32	0	262	97	117	2	0	216	744
05:15 PM	**46**	3	**213**	0	**262**	3	1	**6**	0	10	**3**	234	36	0	273	103	**125**	**3**	0	231	**776**
05:30 PM	38	3	206	0	247	2	2	4	0	8	1	**237**	39	0	277	109	122	3	0	234	766
05:45 PM	35	4	197	0	236	**6**	3	5	0	**14**	2	234	**42**	0	**278**	**117**	118	2	0	**237**	765
Total Volume	161	15	826	0	1002	13	9	19	0	41	6	935	149	0	1090	426	482	10	0	918	3051
% App. Total	16.1	1.5	82.4	0		31.7	22	46.3	0		0.6	85.8	13.7	0		46.4	52.5	1.1	0		
PHF	.875	.750	.969	.000	.956	.542	.750	.792	.000	.732	.500	.986	.887	.000	.980	.910	.964	.833	.000	.968	.983



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TMC Data
Gravel Springs Rd @ Mall of GA Blvd/
Cedar Glade Lane
3pm - 6pm Sat

File Name : 38080009-Sat
Site Code : 38080009
Start Date : 3/19/2016

Groups Printed- Cars, Trucks, Buses

	Mall of GA Blvd Northbound					Cedar Glade Lane Southbound					Gravel Springs Rd (SR324) Eastbound					Gravel Springs Rd (SR324) Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	54	5	202	0	261	2	3	1	0	6	3	137	39	0	179	164	133	1	0	298	744
03:15 PM	40	4	201	0	245	3	3	2	0	8	4	143	43	0	190	184	138	1	0	323	766
03:30 PM	57	3	214	0	274	1	5	1	0	7	4	151	41	0	196	177	154	0	0	331	808
03:45 PM	45	5	225	0	275	3	4	0	0	7	1	151	58	0	210	174	141	3	0	318	810
Total	196	17	842	0	1055	9	15	4	0	28	12	582	181	0	775	699	566	5	0	1270	3128
04:00 PM	52	4	210	0	266	4	1	1	0	6	2	181	44	0	227	155	137	3	0	295	794
04:15 PM	61	3	240	0	304	2	3	1	0	6	1	174	48	0	223	139	134	1	0	274	807
04:30 PM	55	9	201	0	265	4	3	0	0	7	1	136	38	0	175	171	142	1	0	314	761
04:45 PM	56	8	252	0	316	3	2	2	0	7	4	154	41	0	199	179	134	2	0	315	837
Total	224	24	903	0	1151	13	9	4	0	26	8	645	171	0	824	644	547	7	0	1198	3199
05:00 PM	64	3	220	0	287	3	4	0	0	7	2	158	42	0	202	144	136	3	0	283	779
05:15 PM	44	5	242	0	291	1	0	1	0	2	5	144	37	0	186	129	156	0	0	285	764
05:30 PM	62	8	222	0	292	2	8	0	0	10	3	177	40	0	220	136	134	2	0	272	794
05:45 PM	50	5	218	0	273	2	4	3	0	9	1	162	37	0	200	193	123	0	0	316	798
Total	220	21	902	0	1143	8	16	4	0	28	11	641	156	0	808	602	549	5	0	1156	3135
Grand Total	640	62	2647	0	3349	30	40	12	0	82	31	1868	508	0	2407	1945	1662	17	0	3624	9462
Apprch %	19.1	1.9	79	0		36.6	48.8	14.6	0		1.3	77.6	21.1	0		53.7	45.9	0.5	0		
Total %	6.8	0.7	28	0	35.4	0.3	0.4	0.1	0	0.9	0.3	19.7	5.4	0	25.4	20.6	17.6	0.2	0	38.3	

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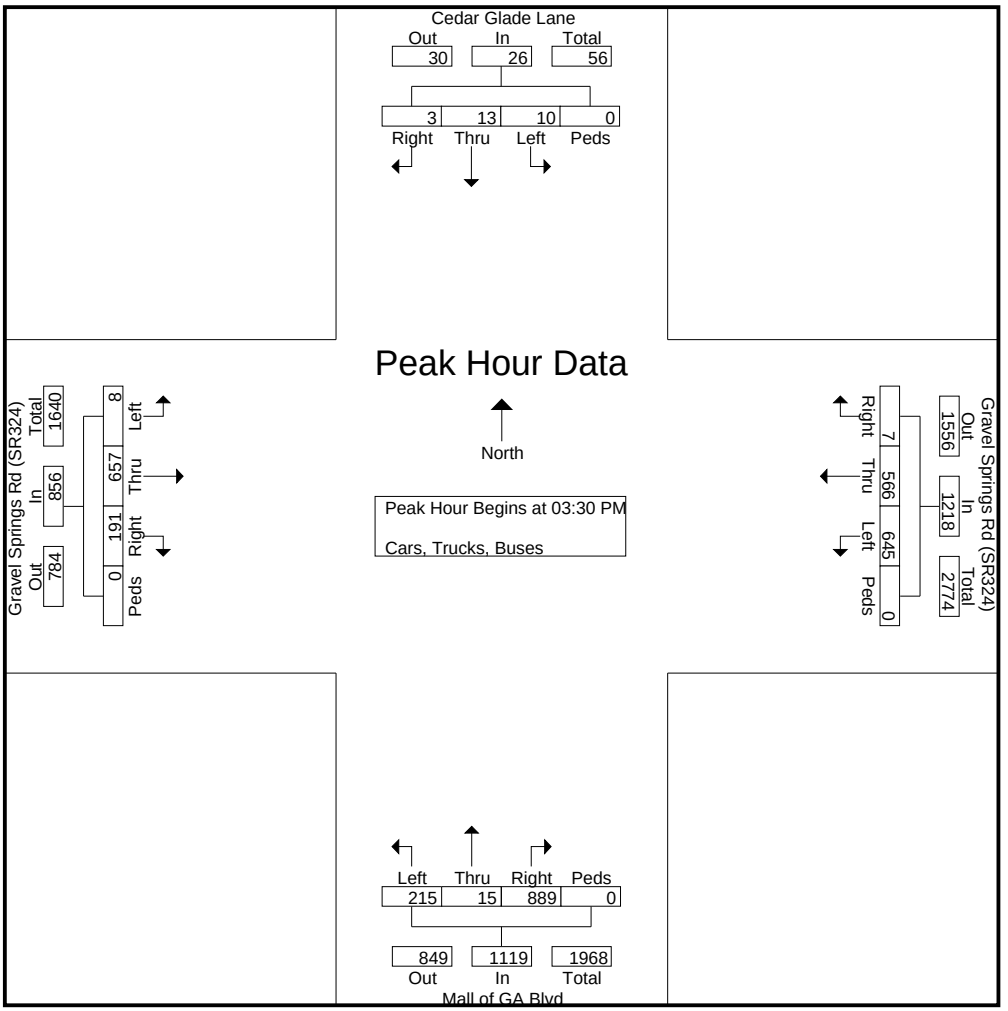
TMC Data
Gravel Springs Rd @ Mall of GA Blvd/
Cedar Glade Lane
3pm - 6pm Sat

File Name : 38080009-Sat
Site Code : 38080009
Start Date : 3/19/2016
Page No : 2

	Mall of GA Blvd Northbound					Cedar Glade Lane Southbound					Gravel Springs Rd (SR324) Eastbound					Gravel Springs Rd (SR324) Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:30 PM																					
03:30 PM	57	3	214	0	274	1	**5**	**1**	0	**7**	**4**	151	41	0	196	**177**	**154**	0	0	**331**	808
03:45 PM	45	**5**	225	0	275	3	4	0	0	7	1	151	**58**	0	210	174	141	**3**	0	318	**810**
04:00 PM	52	4	210	0	266	**4**	1	1	0	6	2	**181**	44	0	**227**	155	137	3	0	295	794
04:15 PM	**61**	3	**240**	0	**304**	2	3	1	0	6	1	174	48	0	223	139	134	1	0	274	807
Total Volume	215	15	889	0	1119	10	13	3	0	26	8	657	191	0	856	645	566	7	0	1218	3219
% App. Total	19.2	1.3	79.4	0		38.5	50	11.5	0		0.9	76.8	22.3	0		53	46.5	0.6	0		
PHF	.881	.750	.926	.000	.920	.625	.650	.750	.000	.929	.500	.907	.823	.000	.943	.911	.919	.583	.000	.920	.994



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TMC Data
Woodward Crossing Blvd @
Crossing View Rd
7-9am I 4.30-6.30pm

File Name : 38080010
Site Code : 38080010
Start Date : 3/23/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Crossing View Rd Northbound					T J Max / others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	0	0	0	1	1	0	0	0	1	0	3	1	0	4	6	9	3	0	18	24
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	3	1	0	5	10	10	3	0	23	28
07:30 AM	2	0	1	0	3	0	0	1	0	1	2	9	3	0	14	5	15	5	0	25	43
07:45 AM	0	0	1	0	1	2	0	1	0	3	8	8	1	0	17	7	21	7	0	35	56
Total	3	0	2	0	5	3	0	2	0	5	11	23	6	0	40	28	55	18	0	101	151
08:00 AM	1	0	0	0	1	3	0	2	0	5	4	9	4	0	17	3	18	8	0	29	52
08:15 AM	2	0	1	0	3	3	0	2	0	5	6	7	3	0	16	2	17	8	0	27	51
08:30 AM	0	0	1	0	1	1	1	3	0	5	1	10	3	0	14	3	19	7	0	29	49
08:45 AM	1	1	0	0	2	1	0	5	0	6	8	14	4	0	26	8	16	10	0	34	68
Total	4	1	2	0	7	8	1	12	0	21	19	40	14	0	73	16	70	33	0	119	220
*** BREAK ***																					
04:30 PM	5	3	8	0	16	23	7	12	0	42	16	42	3	0	61	4	44	19	0	67	186
04:45 PM	5	8	9	0	22	21	5	12	0	38	17	47	5	0	69	9	49	17	0	75	204
Total	10	11	17	0	38	44	12	24	0	80	33	89	8	0	130	13	93	36	0	142	390
05:00 PM	12	2	15	0	29	26	8	18	0	52	21	68	8	0	97	5	45	15	0	65	243
05:15 PM	10	4	9	0	23	23	6	10	0	39	21	53	3	0	77	6	47	14	0	67	206
05:30 PM	6	8	18	0	32	27	3	11	0	41	18	56	2	0	76	5	45	19	0	69	218
05:45 PM	8	4	12	0	24	33	6	11	0	50	19	52	7	0	78	11	51	24	0	86	238
Total	36	18	54	0	108	109	23	50	0	182	79	229	20	0	328	27	188	72	0	287	905
06:00 PM	7	6	9	0	22	28	6	10	0	44	16	44	5	0	65	9	47	20	0	76	207
06:15 PM	6	5	7	0	18	25	5	12	0	42	13	42	3	0	58	6	44	18	0	68	186
Grand Total	66	41	91	0	198	217	47	110	0	374	171	467	56	0	694	99	497	197	0	793	2059
Apprch %	33.3	20.7	46	0		58	12.6	29.4	0		24.6	67.3	8.1	0		12.5	62.7	24.8	0		
Total %	3.2	2	4.4	0	9.6	10.5	2.3	5.3	0	18.2	8.3	22.7	2.7	0	33.7	4.8	24.1	9.6	0	38.5	

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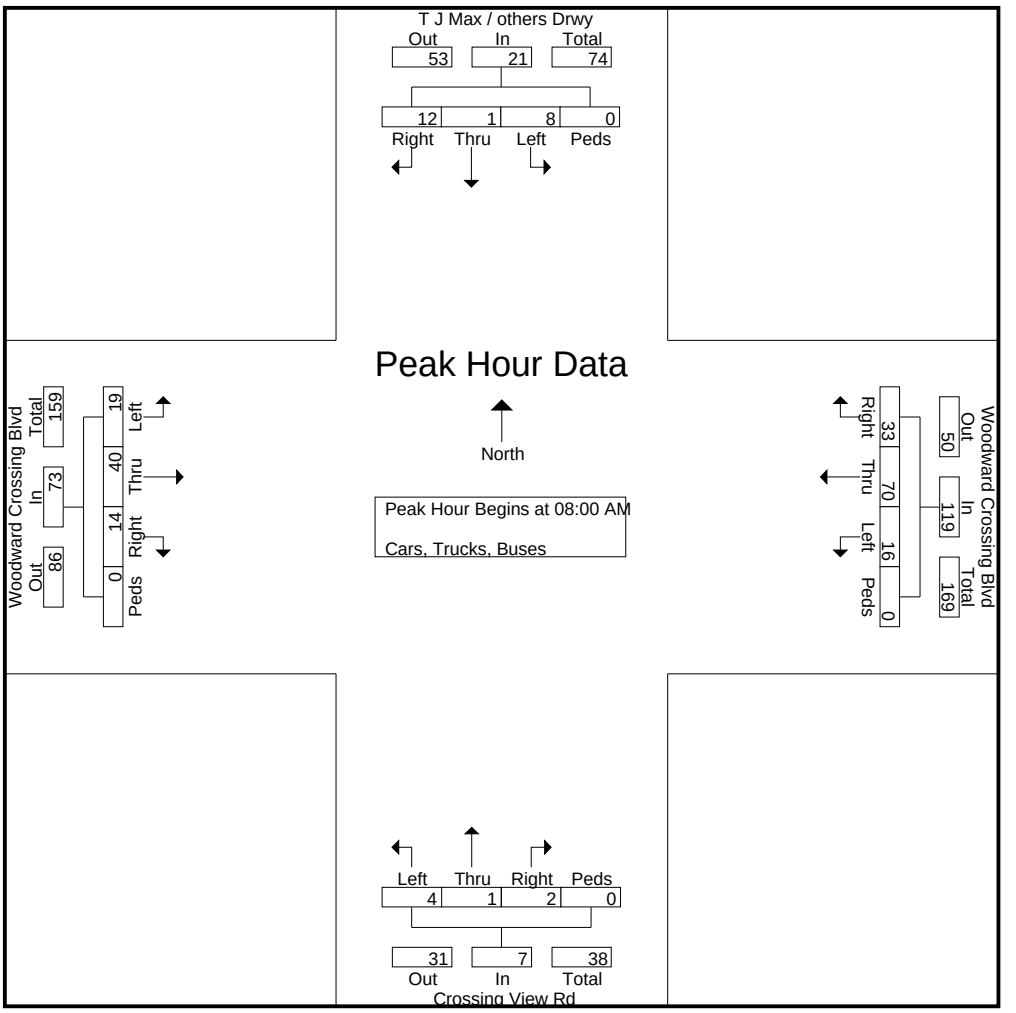
TMC Data
Woodward Crossing Blvd @
Crossing View Rd
7-9am I 4.30-6.30pm

File Name : 38080010
Site Code : 38080010
Start Date : 3/23/2016
Page No : 2

	Crossing View Rd Northbound					T J Max / others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 08:00 AM																					
08:00 AM	1	0	0	0	1	**3**	0	2	0	5	4	9	**4**	0	17	3	18	8	0	29	52
08:15 AM	**2**	0	**1**	0	**3**	3	0	2	0	5	6	7	3	0	16	2	17	8	0	27	51
08:30 AM	0	0	1	0	1	1	**1**	3	0	5	1	10	3	0	14	3	**19**	7	0	29	49
08:45 AM	1	**1**	0	0	2	1	0	**5**	0	**6**	**8**	**14**	4	0	**26**	**8**	16	**10**	0	**34**	**68**
Total Volume	4	1	2	0	7	8	1	12	0	21	19	40	14	0	73	16	70	33	0	119	220
% App. Total	57.1	14.3	28.6	0		38.1	4.8	57.1	0		26	54.8	19.2	0		13.4	58.8	27.7	0		
PHF	.500	.250	.500	.000	.583	.667	.250	.600	.000	.875	.594	.714	.875	.000	.702	.500	.921	.825	.000	.875	.809



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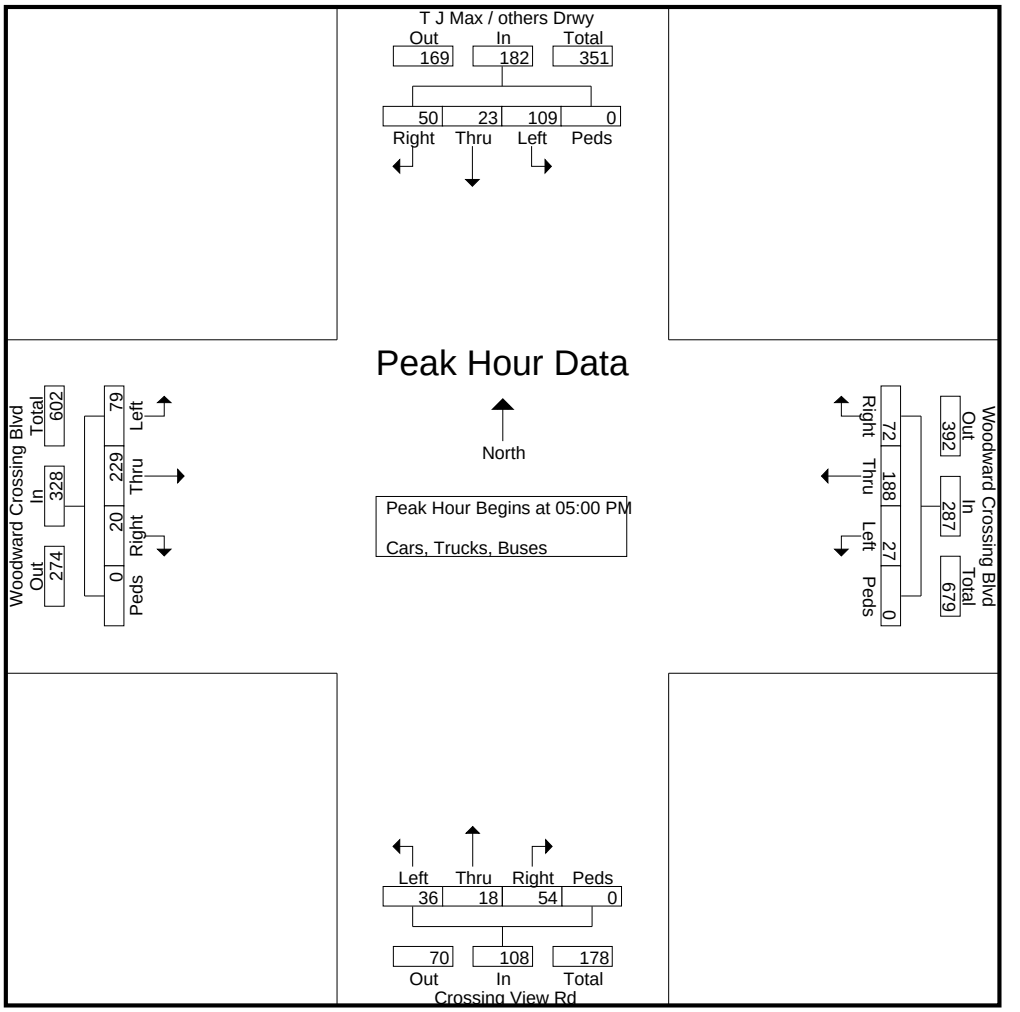
TMC Data
Woodward Crossing Blvd @
Crossing View Rd
7-9am I 4.30-6.30pm

File Name : 38080010
Site Code : 38080010
Start Date : 3/23/2016
Page No : 3

	Crossing View Rd Northbound					T J Max / others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**12**	2	15	0	29	26	**8**	**18**	0	**52**	**21**	**68**	**8**	0	**97**	5	45	15	0	65	**243**
05:15 PM	10	4	9	0	23	23	6	10	0	39	21	53	3	0	77	6	47	14	0	67	206
05:30 PM	6	**8**	**18**	0	**32**	27	3	11	0	41	18	56	2	0	76	5	45	19	0	69	218
05:45 PM	8	4	12	0	24	**33**	6	11	0	50	19	52	7	0	78	**11**	**51**	**24**	0	**86**	238
Total Volume	36	18	54	0	108	109	23	50	0	182	79	229	20	0	328	27	188	72	0	287	905
% App. Total	33.3	16.7	50	0		59.9	12.6	27.5	0		24.1	69.8	6.1	0		9.4	65.5	25.1	0		
PHF	.750	.563	.750	.000	.844	.826	.719	.694	.000	.875	.940	.842	.625	.000	.845	.614	.922	.750	.000	.834	.931



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TMC Data
Woodward Crossing Blvd @
Crossing View Rd
3pm - 6pm Sat

File Name : 38080010-Sat
Site Code : 38080010
Start Date : 3/19/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Crossing View Rd Northbound					T J Max / others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	28	25	16	0	69	52	30	39	0	121	63	57	13	0	133	15	63	46	0	124	447
03:15 PM	30	20	23	0	73	49	23	36	0	108	48	68	11	0	127	17	66	48	0	131	439
03:30 PM	26	17	9	0	52	36	20	51	0	107	37	74	17	0	128	13	57	54	0	124	411
03:45 PM	23	21	19	0	63	41	16	38	0	95	37	54	24	0	115	12	59	49	0	120	393
Total	107	83	67	0	257	178	89	164	0	431	185	253	65	0	503	57	245	197	0	499	1690
04:00 PM	29	21	14	0	64	51	24	45	0	120	49	58	18	0	125	18	49	47	0	114	423
04:15 PM	32	14	27	0	73	51	23	48	0	122	47	73	14	0	134	12	46	34	0	92	421
04:30 PM	28	19	20	0	67	35	14	44	0	93	44	71	13	0	128	19	42	43	0	104	392
04:45 PM	29	19	13	0	61	55	22	42	0	119	35	77	13	0	125	11	45	38	0	94	399
Total	118	73	74	0	265	192	83	179	0	454	175	279	58	0	512	60	182	162	0	404	1635
05:00 PM	27	10	18	0	55	37	22	42	0	101	38	68	17	0	123	16	54	44	0	114	393
05:15 PM	25	11	19	0	55	37	25	40	0	102	24	74	8	0	106	5	48	24	0	77	340
05:30 PM	28	17	17	0	62	43	19	37	0	99	44	53	19	0	116	6	53	33	0	92	369
05:45 PM	24	15	21	0	60	35	20	34	0	89	33	50	10	0	93	14	48	39	0	101	343
Total	104	53	75	0	232	152	86	153	0	391	139	245	54	0	438	41	203	140	0	384	1445
Grand Total	329	209	216	0	754	522	258	496	0	1276	499	777	177	0	1453	158	630	499	0	1287	4770
Apprch %	43.6	27.7	28.6	0		40.9	20.2	38.9	0		34.3	53.5	12.2	0		12.3	49	38.8	0		
Total %	6.9	4.4	4.5	0	15.8	10.9	5.4	10.4	0	26.8	10.5	16.3	3.7	0	30.5	3.3	13.2	10.5	0	27	

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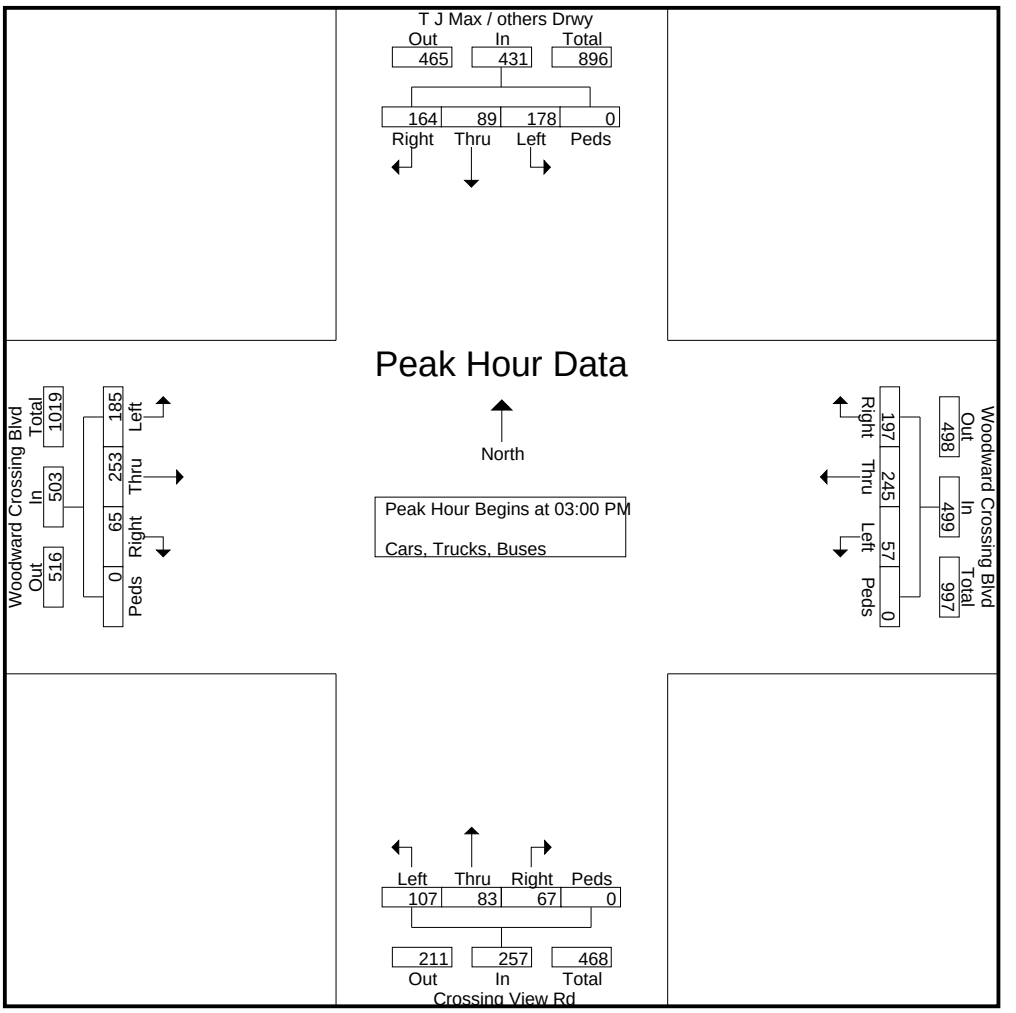
TMC Data
Woodward Crossing Blvd @
Crossing View Rd
3pm - 6pm Sat

File Name : 38080010-Sat
Site Code : 38080010
Start Date : 3/19/2016
Page No : 2

	Crossing View Rd Northbound					T J Max / others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	28	**25**	16	0	69	**52**	**30**	39	0	**121**	**63**	57	13	0	**133**	15	63	46	0	124	**447**
03:15 PM	**30**	20	**23**	0	**73**	49	23	36	0	108	48	68	11	0	127	**17**	**66**	48	0	**131**	439
03:30 PM	26	17	9	0	52	36	20	**51**	0	107	37	**74**	17	0	128	13	57	**54**	0	124	411
03:45 PM	23	21	19	0	63	41	16	38	0	95	37	54	**24**	0	115	12	59	49	0	120	393
Total Volume	107	83	67	0	257	178	89	164	0	431	185	253	65	0	503	57	245	197	0	499	1690
% App. Total	41.6	32.3	26.1	0		41.3	20.6	38.1	0		36.8	50.3	12.9	0		11.4	49.1	39.5	0		
PHF	.892	.830	.728	.000	.880	.856	.742	.804	.000	.890	.734	.855	.677	.000	.945	.838	.928	.912	.000	.952	.945



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TMC Data
Woodward Crossing Blvd @
Piedmont Court Dr
7-9am I 4.30-6.30pm

File Name : 38080011
Site Code : 38080011
Start Date : 3/23/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Piedmont Court Dr Northbound					T J Max/ others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	4	0	4	3	4	4	0	11	0	9	0	0	9	24
07:15 AM	1	0	1	0	2	0	0	2	0	2	5	7	9	0	21	2	6	1	0	9	34
07:30 AM	1	0	0	0	1	0	0	1	0	1	6	13	2	0	21	0	6	1	0	7	30
07:45 AM	0	1	0	0	1	0	1	1	0	2	9	16	9	0	34	5	15	7	0	27	64
Total	2	1	1	0	4	0	1	8	0	9	23	40	24	0	87	7	36	9	0	52	152
08:00 AM	2	0	1	0	3	2	0	7	0	9	6	16	5	0	27	1	14	3	0	18	57
08:15 AM	3	0	0	0	3	0	0	8	0	8	18	16	3	0	37	6	11	2	0	19	67
08:30 AM	0	2	1	0	3	0	4	9	0	13	14	19	7	0	40	7	17	1	0	25	81
08:45 AM	8	0	5	0	13	2	3	8	0	13	19	29	9	0	57	8	18	2	0	28	111
Total	13	2	7	0	22	4	7	32	0	43	57	80	24	0	161	22	60	8	0	90	316
*** BREAK ***																					
04:30 PM	17	10	13	0	40	8	7	49	0	64	36	73	27	0	136	11	45	12	0	68	308
04:45 PM	19	15	19	0	53	12	9	38	0	59	47	60	45	0	152	14	42	18	0	74	338
Total	36	25	32	0	93	20	16	87	0	123	83	133	72	0	288	25	87	30	0	142	646
05:00 PM	33	14	15	0	62	8	9	32	0	49	40	58	27	0	125	8	46	13	0	67	303
05:15 PM	24	11	12	0	47	7	14	37	0	58	48	53	29	0	130	10	42	17	0	69	304
05:30 PM	28	13	22	0	63	11	14	32	0	57	42	52	43	0	137	8	57	19	0	84	341
05:45 PM	24	12	24	0	60	7	15	35	0	57	42	52	33	0	127	12	40	13	0	65	309
Total	109	50	73	0	232	33	52	136	0	221	172	215	132	0	519	38	185	62	0	285	1257
06:00 PM	22	11	24	0	57	7	6	25	0	38	37	48	34	0	119	12	34	16	0	62	276
06:15 PM	17	11	18	0	46	7	9	38	0	54	32	40	37	0	109	9	37	10	0	56	265
Grand Total	199	100	155	0	454	71	91	326	0	488	404	556	323	0	1283	113	439	135	0	687	2912
Apprch %	43.8	22	34.1	0		14.5	18.6	66.8	0		31.5	43.3	25.2	0		16.4	63.9	19.7	0		
Total %	6.8	3.4	5.3	0	15.6	2.4	3.1	11.2	0	16.8	13.9	19.1	11.1	0	44.1	3.9	15.1	4.6	0	23.6	

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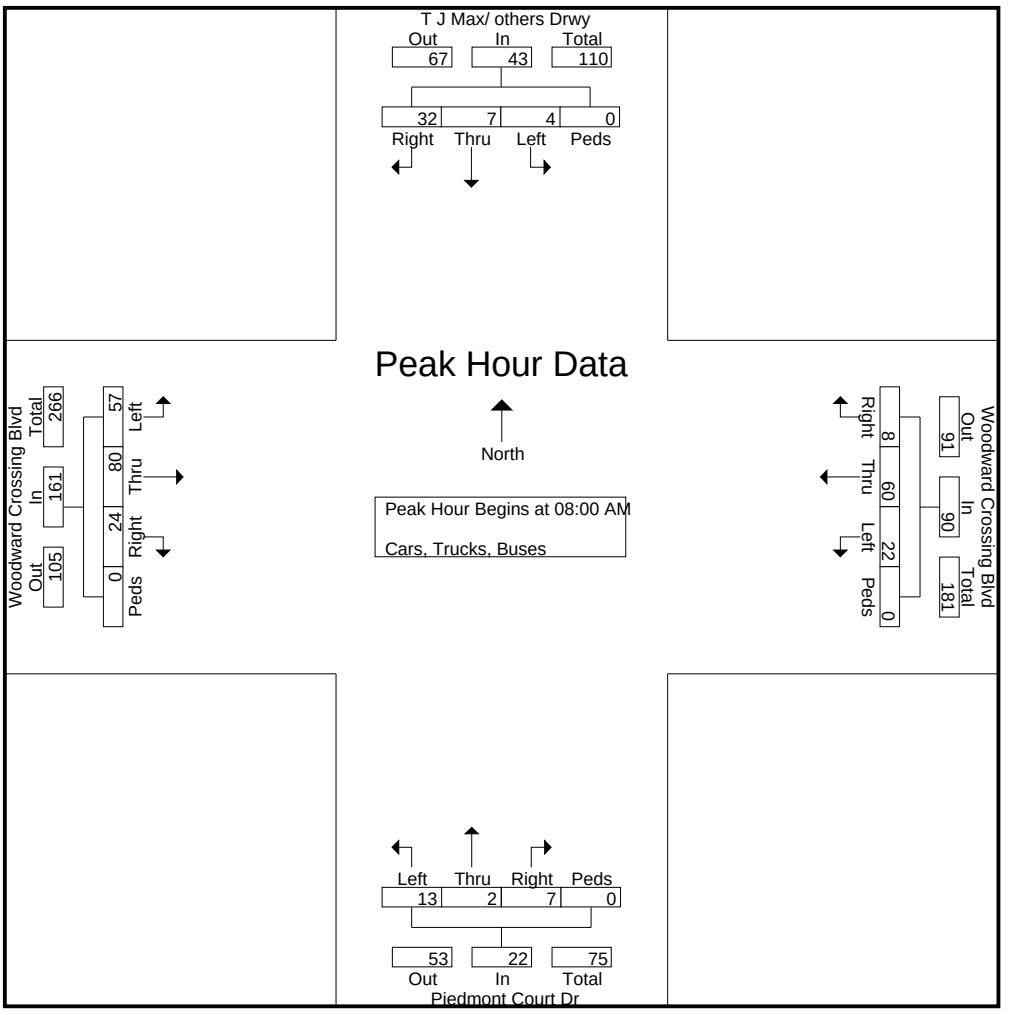
TMC Data
Woodward Crossing Blvd @
Piedmont Court Dr
7-9am I 4.30-6.30pm

File Name : 38080011
Site Code : 38080011
Start Date : 3/23/2016
Page No : 2

	Piedmont Court Dr Northbound					T J Max/ others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 08:00 AM																					
08:00 AM	2	0	1	0	3	**2**	0	7	0	9	6	16	5	0	27	1	14	**3**	0	18	57
08:15 AM	3	0	0	0	3	0	0	8	0	8	18	16	3	0	37	6	11	2	0	19	67
08:30 AM	0	**2**	1	0	3	0	**4**	**9**	0	**13**	14	19	7	0	40	7	17	1	0	25	81
08:45 AM	**8**	0	**5**	0	**13**	2	3	8	0	13	**19**	**29**	**9**	0	**57**	**8**	**18**	2	0	**28**	**111**
Total Volume	13	2	7	0	22	4	7	32	0	43	57	80	24	0	161	22	60	8	0	90	316
% App. Total	59.1	9.1	31.8	0		9.3	16.3	74.4	0		35.4	49.7	14.9	0		24.4	66.7	8.9	0		
PHF	.406	.250	.350	.000	.423	.500	.438	.889	.000	.827	.750	.690	.667	.000	.706	.688	.833	.667	.000	.804	.712



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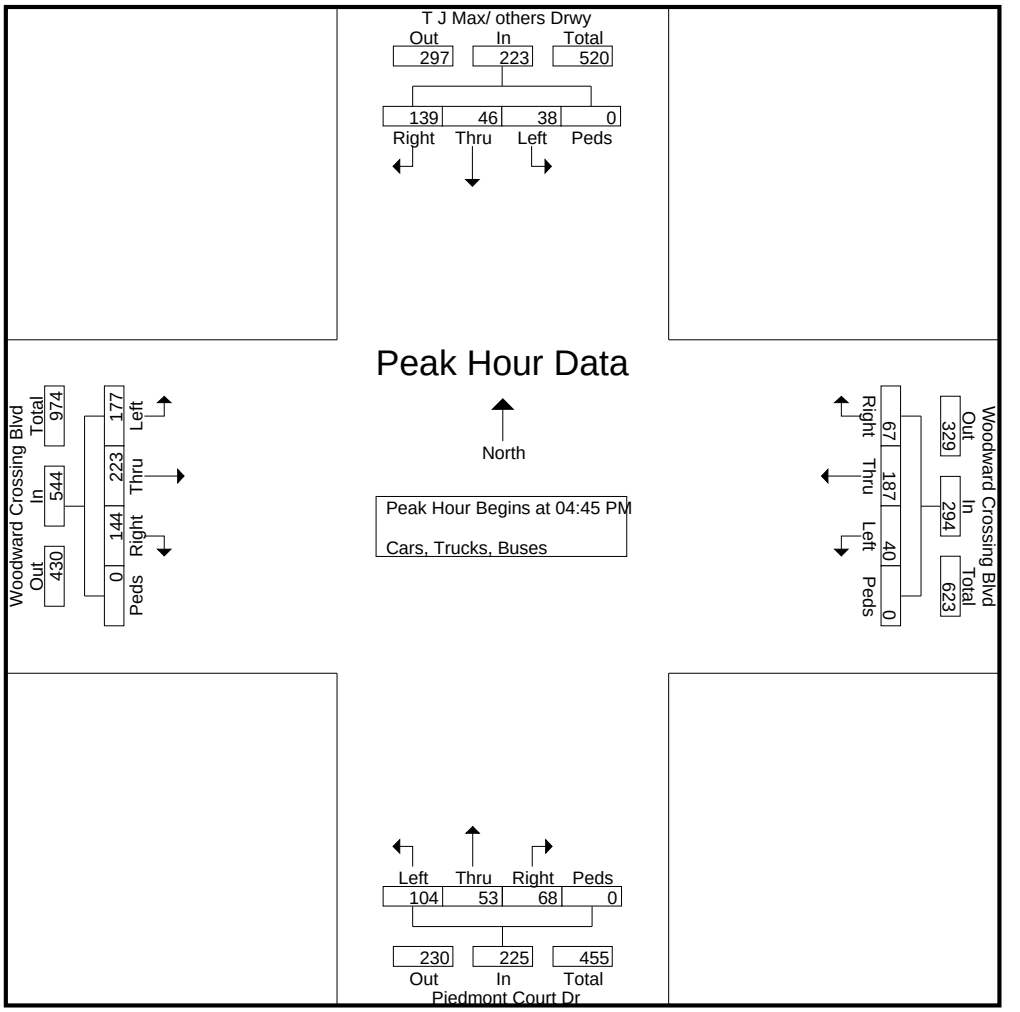
TMC Data
Woodward Crossing Blvd @
Piedmont Court Dr
7-9am I 4.30-6.30pm

File Name : 38080011
Site Code : 38080011
Start Date : 3/23/2016
Page No : 3

	Piedmont Court Dr Northbound					T J Max/ others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	19	**15**	19	0	53	**12**	9	**38**	0	**59**	47	**60**	**45**	0	**152**	**14**	42	18	0	74	338
05:00 PM	**33**	14	15	0	62	8	9	32	0	49	40	58	27	0	125	8	46	13	0	67	303
05:15 PM	24	11	12	0	47	7	**14**	37	0	58	**48**	53	29	0	130	10	42	17	0	69	304
05:30 PM	28	13	**22**	0	**63**	11	14	32	0	57	42	52	43	0	137	8	**57**	**19**	0	**84**	**341**
Total Volume	104	53	68	0	225	38	46	139	0	223	177	223	144	0	544	40	187	67	0	294	1286
% App. Total	46.2	23.6	30.2	0		17	20.6	62.3	0		32.5	41	26.5	0		13.6	63.6	22.8	0		
PHF	.788	.883	.773	.000	.893	.792	.821	.914	.000	.945	.922	.929	.800	.000	.895	.714	.820	.882	.000	.875	.943



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TMC Data
Woodward Crossing Blvd @
Piedmont Court Dr
3pm - 6pm Sat

File Name : 38080011-Sat
Site Code : 38080011
Start Date : 3/19/2016
Page No : 1

Groups Printed- Cars, Trucks, Buses

	Piedmont Court Dr Northbound					T J Max/ others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	50	32	27	0	109	7	17	64	0	88	92	80	74	0	246	21	97	27	0	145	588
03:15 PM	42	49	28	0	119	15	33	96	0	144	97	83	61	0	241	27	85	20	0	132	636
03:30 PM	48	37	28	0	113	15	25	68	0	108	104	80	80	0	264	22	96	21	0	139	624
03:45 PM	55	30	30	0	115	13	20	61	0	94	128	85	58	0	271	21	76	23	0	120	600
Total	195	148	113	0	456	50	95	289	0	434	421	328	273	0	1022	91	354	91	0	536	2448
04:00 PM	48	37	29	0	114	15	20	83	0	118	94	80	68	0	242	24	82	25	0	131	605
04:15 PM	59	34	31	0	124	13	24	74	0	111	90	105	61	0	256	19	85	16	0	120	611
04:30 PM	44	46	28	0	118	22	26	69	0	117	86	80	76	0	242	20	85	17	0	122	599
04:45 PM	48	33	29	0	110	16	28	59	0	103	103	87	76	0	266	18	88	26	0	132	611
Total	199	150	117	0	466	66	98	285	0	449	373	352	281	0	1006	81	340	84	0	505	2426
05:00 PM	48	47	35	0	130	17	13	73	0	103	94	72	82	0	248	29	86	20	0	135	616
05:15 PM	46	33	30	0	109	12	23	58	0	93	75	77	53	0	205	14	80	12	0	106	513
05:30 PM	63	31	19	0	113	14	18	75	0	107	113	80	80	0	273	16	90	22	0	128	621
05:45 PM	44	29	28	0	101	7	16	68	0	91	68	67	86	0	221	17	81	19	0	117	530
Total	201	140	112	0	453	50	70	274	0	394	350	296	301	0	947	76	337	73	0	486	2280
Grand Total	595	438	342	0	1375	166	263	848	0	1277	1144	976	855	0	2975	248	1031	248	0	1527	7154
Apprch %	43.3	31.9	24.9	0		13	20.6	66.4	0		38.5	32.8	28.7	0		16.2	67.5	16.2	0		
Total %	8.3	6.1	4.8	0	19.2	2.3	3.7	11.9	0	17.9	16	13.6	12	0	41.6	3.5	14.4	3.5	0	21.3	

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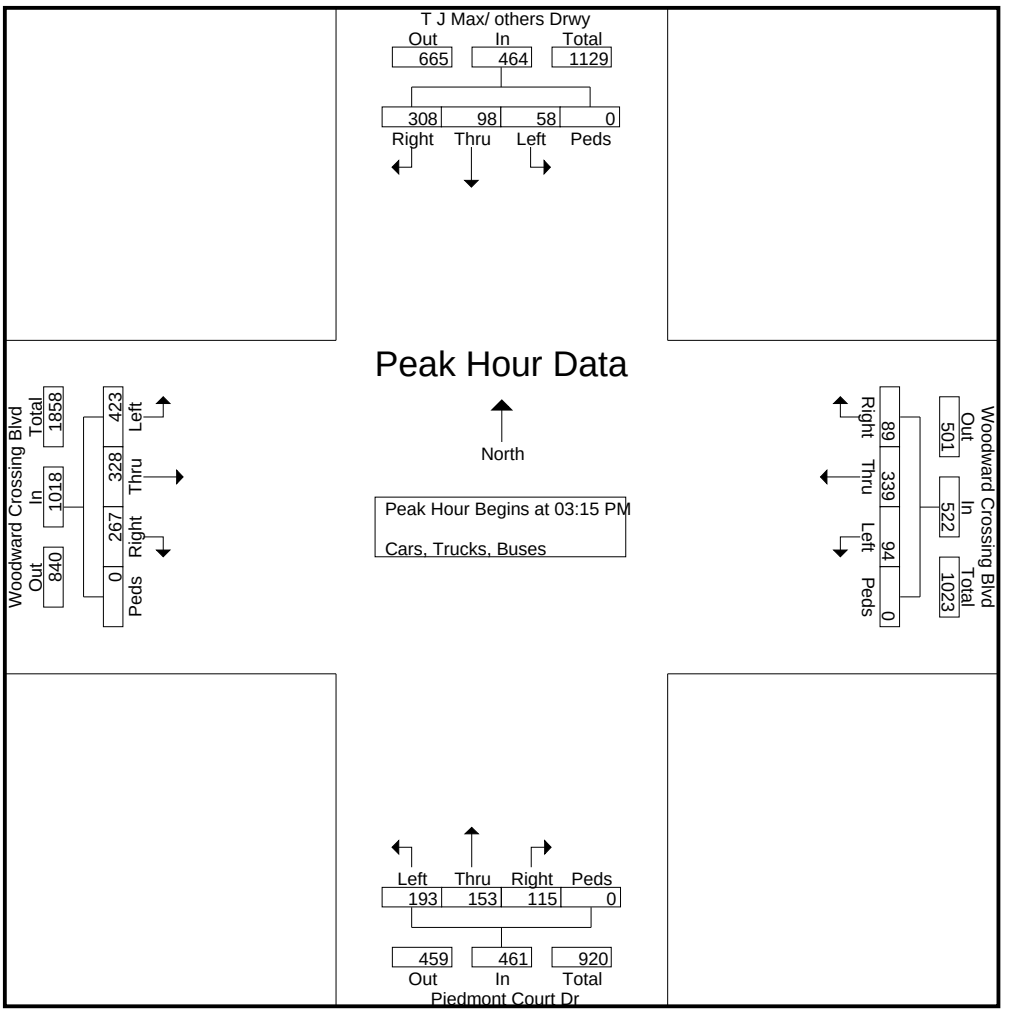
TMC Data
Woodward Crossing Blvd @
Piedmont Court Dr
3pm - 6pm Sat

File Name : 38080011-Sat
Site Code : 38080011
Start Date : 3/19/2016
Page No : 2

	Piedmont Court Dr Northbound					T J Max/ others Drwy Southbound					Woodward Crossing Blvd Eastbound					Woodward Crossing Blvd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	42	**49**	28	0	**119**	**15**	**33**	**96**	0	**144**	97	83	61	0	241	**27**	85	20	0	132	**636**
03:30 PM	48	37	28	0	113	15	25	68	0	108	104	80	**80**	0	264	22	**96**	21	0	**139**	624
03:45 PM	**55**	30	**30**	0	115	13	20	61	0	94	**128**	**85**	58	0	**271**	21	76	23	0	120	600
04:00 PM	48	37	29	0	114	15	20	83	0	118	94	80	68	0	242	24	82	**25**	0	131	605
Total Volume	193	153	115	0	461	58	98	308	0	464	423	328	267	0	1018	94	339	89	0	522	2465
% App. Total	41.9	33.2	24.9	0		12.5	21.1	66.4	0		41.6	32.2	26.2	0		18	64.9	17	0		
PHF	.877	.781	.958	.000	.968	.967	.742	.802	.000	.806	.826	.965	.834	.000	.939	.870	.883	.890	.000	.939	.969



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TMC Data
Buford Dr (SR20) @ Gravel Springs Rd/
Financial Center Way
7-9am I 4.30-6.30pm

File Name : 38640001
Site Code : 38640001
Start Date : 6/15/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Finalcial Center Way Eastbound					Gravel Springs Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	7	305	2	0	314	33	253	15	0	301	23	6	9	0	38	23	10	215	0	248	901
07:15 AM	8	313	3	0	324	52	233	14	0	299	34	3	6	0	43	31	16	212	0	259	925
07:30 AM	5	389	3	0	397	49	300	14	0	363	34	7	1	0	42	17	11	221	0	249	1051
07:45 AM	9	338	8	0	355	61	277	12	0	350	36	4	5	0	45	27	23	250	0	300	1050
Total	29	1345	16	0	1390	195	1063	55	0	1313	127	20	21	0	168	98	60	898	0	1056	3927
08:00 AM	15	321	3	0	339	71	238	19	0	328	31	6	7	0	44	25	16	208	0	249	960
08:15 AM	7	332	6	0	345	59	273	24	0	356	25	4	4	0	33	18	14	193	0	225	959
08:30 AM	10	323	11	0	344	57	257	14	0	328	26	11	6	0	43	27	31	200	0	258	973
08:45 AM	5	390	9	0	404	82	308	28	0	418	28	8	7	0	43	27	21	171	0	219	1084
Total	37	1366	29	0	1432	269	1076	85	0	1430	110	29	24	0	163	97	82	772	0	951	3976
*** BREAK ***																					
04:30 PM	18	404	18	0	440	174	414	44	0	632	71	22	18	0	111	33	26	101	0	160	1343
04:45 PM	23	447	21	0	491	187	465	25	0	677	68	29	18	0	115	31	27	109	0	167	1450
Total	41	851	39	0	931	361	879	69	0	1309	139	51	36	0	226	64	53	210	0	327	2793
05:00 PM	15	436	21	0	472	195	447	21	0	663	63	31	16	0	110	27	24	110	0	161	1406
05:15 PM	16	441	24	0	481	202	464	21	0	687	58	34	11	0	103	23	21	89	0	133	1404
05:30 PM	21	428	18	0	467	223	494	38	0	755	62	47	9	0	118	29	44	106	0	179	1519
05:45 PM	23	407	25	0	455	224	511	30	0	765	73	28	15	0	116	35	42	111	0	188	1524
Total	75	1712	88	0	1875	844	1916	110	0	2870	256	140	51	0	447	114	131	416	0	661	5853
06:00 PM	27	367	17	0	411	179	415	19	0	613	97	38	8	0	143	31	33	93	0	157	1324
06:15 PM	28	380	23	0	431	250	506	35	0	791	50	41	13	0	104	21	28	98	0	147	1473
Grand Total	237	6021	212	0	6470	2098	5855	373	0	8326	779	319	153	0	1251	425	387	2487	0	3299	19346
Apprch %	3.7	93.1	3.3	0		25.2	70.3	4.5	0		62.3	25.5	12.2	0		12.9	11.7	75.4	0		
Total %	1.2	31.1	1.1	0	33.4	10.8	30.3	1.9	0	43	4	1.6	0.8	0	6.5	2.2	2	12.9	0	17.1	

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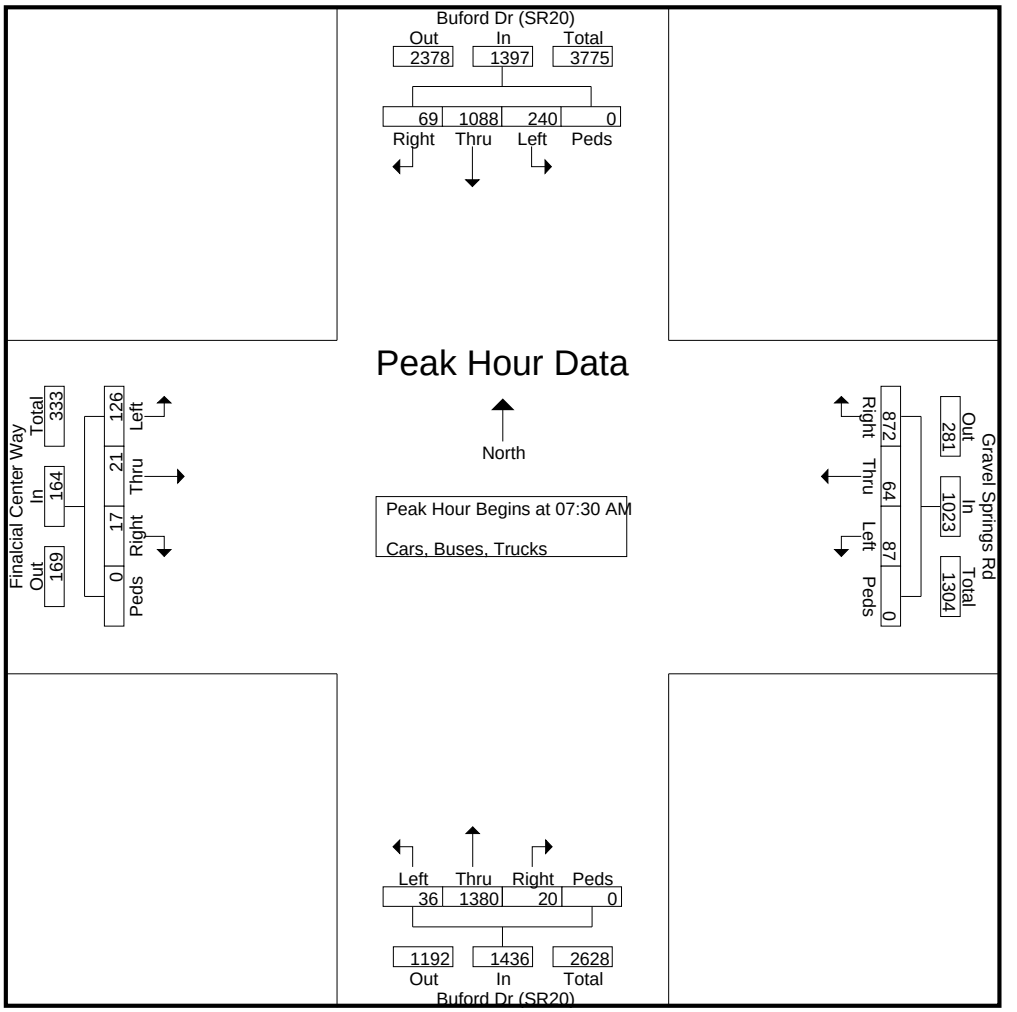
TMC Data
Buford Dr (SR20) @ Gravel Springs Rd/
Financial Center Way
7-9am I 4.30-6.30pm

File Name : 38640001
Site Code : 38640001
Start Date : 6/15/2016

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Finalcial Center Way Eastbound					Gravel Springs Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:30 AM																					
07:30 AM	5	**389**	3	0	**397**	49	**300**	14	0	**363**	34	**7**	1	0	42	17	11	221	0	249	**1051**
07:45 AM	9	338	**8**	0	355	61	277	12	0	350	**36**	4	5	0	**45**	**27**	**23**	**250**	0	**300**	1050
08:00 AM	**15**	321	3	0	339	**71**	238	19	0	328	31	6	**7**	0	44	25	16	208	0	249	960
08:15 AM	7	332	6	0	345	59	273	**24**	0	356	25	4	4	0	33	18	14	193	0	225	959
Total Volume	36	1380	20	0	1436	240	1088	69	0	1397	126	21	17	0	164	87	64	872	0	1023	4020
% App. Total	2.5	96.1	1.4	0		17.2	77.9	4.9	0		76.8	12.8	10.4	0		8.5	6.3	85.2	0		
PHF	.600	.887	.625	.000	.904	.845	.907	.719	.000	.962	.875	.750	.607	.000	.911	.806	.696	.872	.000	.853	.956



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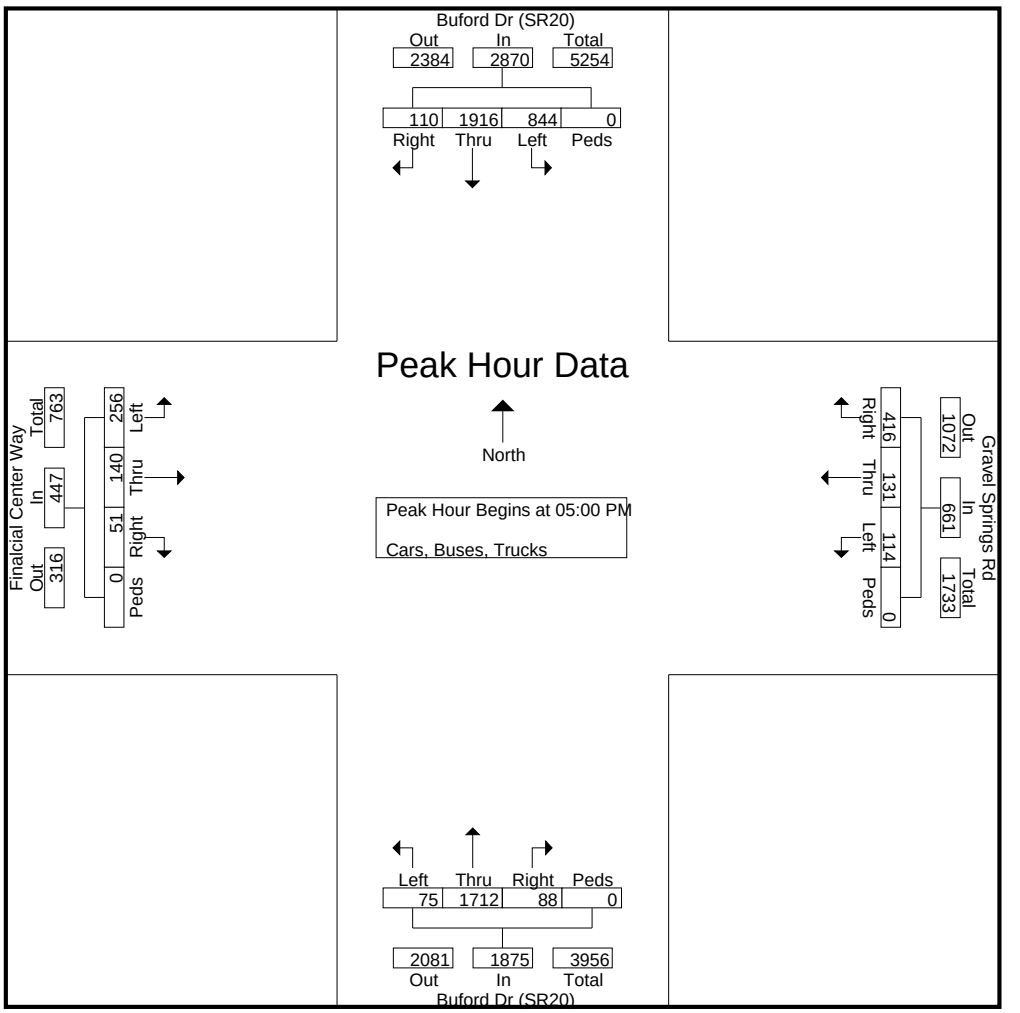
TMC Data
Buford Dr (SR20) @ Gravel Springs Rd/
Financial Center Way
7-9am I 4.30-6.30pm

File Name : 38640001
Site Code : 38640001
Start Date : 6/15/2016
Page No : 3

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Finalcial Center Way Eastbound					Gravel Springs Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	15	436	21	0	472	195	447	21	0	663	63	31	**16**	0	110	27	24	110	0	161	1406
05:15 PM	16	**441**	24	0	**481**	202	464	21	0	687	58	34	11	0	103	23	21	89	0	133	1404
05:30 PM	21	428	18	0	467	223	494	**38**	0	755	62	**47**	9	0	**118**	29	**44**	106	0	179	1519
05:45 PM	**23**	407	**25**	0	455	**224**	**511**	30	0	**765**	**73**	28	15	0	116	**35**	42	**111**	0	**188**	**1524**
Total Volume	75	1712	88	0	1875	844	1916	110	0	2870	256	140	51	0	447	114	131	416	0	661	5853
% App. Total	4	91.3	4.7	0		29.4	66.8	3.8	0		57.3	31.3	11.4	0		17.2	19.8	62.9	0		
PHF	.815	.971	.880	.000	.975	.942	.937	.724	.000	.938	.877	.745	.797	.000	.947	.814	.744	.937	.000	.879	.960



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TMC Data
Buford Dr (SR20) @ Gravel Springs Rd/
Financial Center Way
3pm-6pm Sat

File Name : 38640001-Sat
Site Code : 38640001
Start Date : 6/18/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Finalcial Center Way Eastbound					Gravel Springs Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	20	458	18	0	496	137	467	48	0	652	87	45	24	0	156	35	44	119	0	198	1502
03:15 PM	21	463	21	0	505	135	472	51	0	658	92	42	25	0	159	37	48	117	0	202	1524
03:30 PM	23	459	19	0	501	138	486	62	0	686	96	46	27	0	169	39	50	124	0	213	1569
03:45 PM	20	489	15	0	524	142	451	48	0	641	95	44	22	0	161	43	47	129	0	219	1545
Total	84	1869	73	0	2026	552	1876	209	0	2637	370	177	98	0	645	154	189	489	0	832	6140
04:00 PM	21	447	17	0	485	138	470	39	0	647	77	48	20	0	145	37	33	143	0	213	1490
04:15 PM	31	472	20	0	523	115	397	34	0	546	86	45	17	0	148	44	27	136	0	207	1424
04:30 PM	20	457	22	0	499	120	458	32	0	610	98	50	20	0	168	36	36	113	0	185	1462
04:45 PM	24	465	19	0	508	114	457	27	0	598	92	55	18	0	165	34	45	122	0	201	1472
Total	96	1841	78	0	2015	487	1782	132	0	2401	353	198	75	0	626	151	141	514	0	806	5848
05:00 PM	32	439	24	0	495	109	425	27	0	561	97	39	23	0	159	41	35	121	0	197	1412
05:15 PM	30	451	27	0	508	119	447	31	0	597	76	49	22	0	147	29	31	127	0	187	1439
05:30 PM	28	452	24	0	504	125	421	25	0	571	95	50	19	0	164	36	32	124	0	192	1431
05:45 PM	37	410	19	0	466	108	407	29	0	544	90	49	16	0	155	46	43	102	0	191	1356
Total	127	1752	94	0	1973	461	1700	112	0	2273	358	187	80	0	625	152	141	474	0	767	5638
Grand Total	307	5462	245	0	6014	1500	5358	453	0	7311	1081	562	253	0	1896	457	471	1477	0	2405	17626
Apprch %	5.1	90.8	4.1	0		20.5	73.3	6.2	0		57	29.6	13.3	0		19	19.6	61.4	0		
Total %	1.7	31	1.4	0	34.1	8.5	30.4	2.6	0	41.5	6.1	3.2	1.4	0	10.8	2.6	2.7	8.4	0	13.6	

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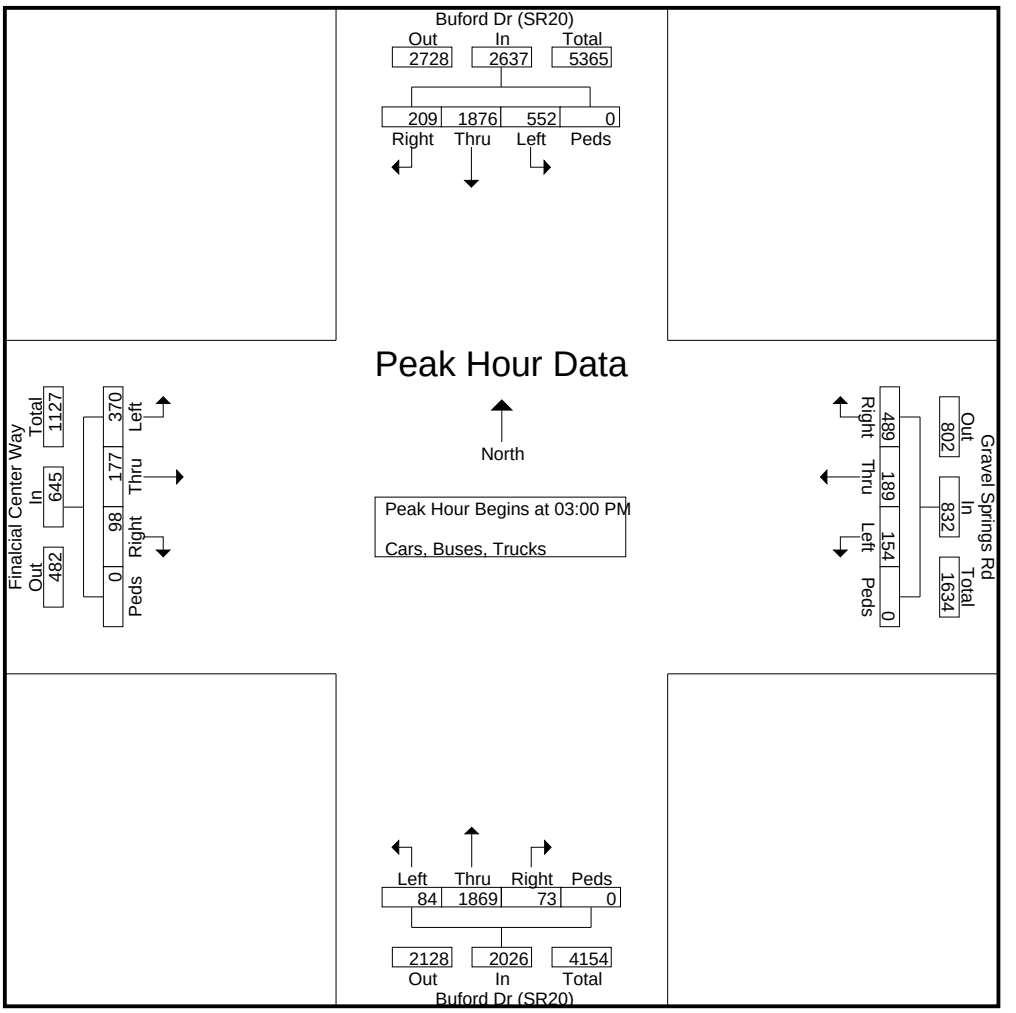
TMC Data
Buford Dr (SR20) @ Gravel Springs Rd/
Financial Center Way
3pm-6pm Sat

File Name : 38640001-Sat
Site Code : 38640001
Start Date : 6/18/2016

	Buford Dr (SR20) Northbound					Buford Dr (SR20) Southbound					Finalcial Center Way Eastbound					Gravel Springs Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	20	458	18	0	496	137	467	48	0	652	87	45	24	0	156	35	44	119	0	198	1502
03:15 PM	21	463	**21**	0	505	135	472	51	0	658	92	42	25	0	159	37	48	117	0	202	1524
03:30 PM	**23**	459	19	0	501	138	**486**	**62**	0	**686**	**96**	**46**	**27**	0	**169**	39	**50**	124	0	213	**1569**
03:45 PM	20	**489**	15	0	**524**	**142**	451	48	0	641	95	44	22	0	161	**43**	47	**129**	0	**219**	1545
Total Volume	84	1869	73	0	2026	552	1876	209	0	2637	370	177	98	0	645	154	189	489	0	832	6140
% App. Total	4.1	92.3	3.6	0		20.9	71.1	7.9	0		57.4	27.4	15.2	0		18.5	22.7	58.8	0		
PHF	.913	.956	.869	.000	.967	.972	.965	.843	.000	.961	.964	.962	.907	.000	.954	.895	.945	.948	.000	.950	.978



Appendix C
Traffic Volume Worksheets

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 1. Buford Drive (SR 20) / Mall of Georgia Boulevard

Weekday A.M. Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	102	1576	169	1847	18	1141	28	1187	40	15	94	149	452	21	23	496
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**115**	**1773**	**190**	**1847**	**20**	**1284**	**32**	**1187**	**45**	**17**	**106**	**149**	**509**	**24**	**26**	**496**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	44	44	0	0	0	0	0	6	0	6	32	4	0	36
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	49	49	0	0	0	0	0	6	0	6	82	10	0	92
Destinations Office	0	0	60	60	0	0	0	0	0	3	0	3	6	0	0	6
Destinations Total	**0**	**0**	**153**	**153**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**15**	**120**	**14**	**0**	**134**
Build Volumes	**115**	**1773**	**343**	**2231**	**20**	**1284**	**32**	**1335**	**45**	**32**	**106**	**183**	**629**	**38**	**26**	**692**

Weekday P.M. Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	496	1756	743	2995	43	1702	124	1869	151	163	269	583	422	118	57	597
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**558**	**1976**	**836**	**2995**	**48**	**1915**	**140**	**1869**	**170**	**183**	**303**	**583**	**475**	**133**	**64**	**597**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	117	117	0	0	0	0	0	16	0	16	115	15	0	130
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	66	66	0	0	0	0	0	8	0	8	47	6	0	53
Destinations Office	0	0	8	8	0	0	0	0	0	0	0	0	54	3	0	57
Destinations Total	**0**	**0**	**191**	**191**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**24**	**216**	**24**	**0**	**240**
Build Volumes	**558**	**1976**	**1027**	**3560**	**48**	**1915**	**140**	**2103**	**170**	**207**	**303**	**680**	**691**	**157**	**64**	**912**

Saturday Afternoon Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 12, 2016)	930	2489	649	4068	109	1795	236	2140	417	433	892	1742	741	285	72	1098
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**1046**	**2800**	**730**	**4068**	**123**	**2019**	**266**	**2140**	**469**	**487**	**1004**	**1742**	**834**	**321**	**81**	**1098**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	196	196	0	0	0	0	0	26	0	26	161	22	0	183
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	65	65	0	0	0	0	0	8	0	8	67	8	0	75
Destinations Office	0	0	5	5	0	0	0	0	0	0	0	0	6	0	0	6
Destinations Total	**0**	**0**	**266**	**266**	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**34**	**234**	**30**	**0**	**264**
Build Volumes	**1046**	**2800**	**996**	**4843**	**123**	**2019**	**266**	**2408**	**469**	**521**	**1004**	**1994**	**1068**	**351**	**81**	**1499**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 2. Mall of Georgia Boulevard / Coastal Avenue

Weekday A.M. Peak Hour	Northbound Coastal Avenue				Southbound Coastal Avenue				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	3	2	0	5	12	0	9	21	45	188	0	233	2	432	26	460
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**3**	**2**	**0**	**5**	**14**	**0**	**10**	**21**	**51**	**212**	**0**	**233**	**2**	**486**	**29**	**460**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	50	0	50	0	36	0	36
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	1	1	1	0	0	1	0	55	0	55	2	92	2	96
Destinations Office	0	0	0	0	0	0	0	0	0	63	0	63	0	6	0	6
Destinations Total	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**168**	**0**	**168**	**2**	**134**	**2**	**138**
Build Volumes	**3**	**2**	**1**	**7**	**15**	**0**	**10**	**25**	**51**	**380**	**0**	**430**	**4**	**620**	**31**	**656**

Weekday P.M. Peak Hour	Northbound Coastal Avenue				Southbound Coastal Avenue				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	30	2	6	38	88	15	111	214	199	749	5	953	11	427	51	489
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**34**	**2**	**7**	**38**	**99**	**17**	**125**	**214**	**224**	**843**	**6**	**953**	**12**	**480**	**57**	**489**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	133	0	133	0	130	0	130
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	2	2	2	0	0	2	0	74	0	74	1	53	1	55
Destinations Office	0	0	0	0	0	0	0	0	0	8	0	8	0	57	0	57
Destinations Total	**0**	**0**	**2**	**2**	**2**	**0**	**0**	**2**	**0**	**215**	**0**	**215**	**1**	**240**	**1**	**242**
Build Volumes	**34**	**2**	**9**	**45**	**101**	**17**	**125**	**243**	**224**	**1058**	**6**	**1287**	**13**	**720**	**58**	**792**

Saturday Afternoon Peak Hour	Northbound Coastal Avenue				Southbound Coastal Avenue				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 12, 2016)	35	9	17	61	137	13	282	432	343	828	10	1181	24	733	94	851
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**39**	**10**	**19**	**61**	**154**	**15**	**317**	**432**	**386**	**932**	**11**	**1181**	**27**	**825**	**106**	**851**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	222	0	222	0	183	0	183
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	2	2	2	0	0	2	0	73	0	73	2	75	2	79
Destinations Office	0	0	0	0	0	0	0	0	0	5	0	5	0	6	0	6
Destinations Total	**0**	**0**	**2**	**2**	**2**	**0**	**0**	**2**	**0**	**300**	**0**	**300**	**2**	**264**	**2**	**268**
Build Volumes	**39**	**10**	**21**	**71**	**156**	**15**	**317**	**488**	**386**	**1232**	**11**	**1629**	**29**	**1089**	**108**	**1225**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 3. Mall of Georgia Boulevard / Nature Center Parkway

Weekday A.M. Peak Hour	Northbound Nature Center Parkway				Southbound Nature Center Parkway				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	0	1	0	1	1	0	6	7	29	159	0	188	7	489	7	503
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**0**	**1**	**0**	**1**	**1**	**0**	**7**	**7**	**33**	**179**	**0**	**188**	**8**	**550**	**8**	**503**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	2	0	0	2	0	50	0	50	0	36	1	37
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	1	0	0	1	0	57	0	57	0	96	2	98
Destinations Office	0	0	0	0	0	0	0	0	0	63	0	63	0	6	0	6
Destinations Total	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**170**	**0**	**170**	**0**	**138**	**3**	**141**
Build Volumes	**0**	**1**	**0**	**1**	**4**	**0**	**7**	**11**	**33**	**349**	**0**	**382**	**8**	**688**	**11**	**707**

Weekday P.M. Peak Hour	Northbound Nature Center Parkway				Southbound Nature Center Parkway				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	8	0	14	22	44	1	48	93	93	783	5	881	14	427	20	461
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**9**	**0**	**16**	**22**	**50**	**1**	**54**	**93**	**105**	**881**	**6**	**881**	**16**	**480**	**23**	**461**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	4	0	0	4	0	133	0	133	0	130	4	134
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	2	0	0	2	0	78	0	78	0	55	1	56
Destinations Office	0	0	0	0	0	0	0	0	0	8	0	8	0	57	0	57
Destinations Total	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**6**	**0**	**219**	**0**	**219**	**0**	**242**	**5**	**247**
Build Volumes	**9**	**0**	**16**	**25**	**56**	**1**	**54**	**111**	**105**	**1100**	**6**	**1210**	**16**	**722**	**28**	**766**

Saturday Afternoon Peak Hour	Northbound Nature Center Parkway				Southbound Nature Center Parkway				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 12, 2016)	11	3	26	40	101	5	147	253	270	715	15	1000	31	638	75	744
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**12**	**3**	**29**	**40**	**114**	**6**	**165**	**253**	**304**	**804**	**17**	**1000**	**35**	**718**	**84**	**744**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	7	0	0	7	0	222	0	222	0	183	5	188
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	2	0	0	2	0	77	0	77	0	79	2	81
Destinations Office	0	0	0	0	0	0	0	0	0	5	0	5	0	6	0	6
Destinations Total	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**9**	**0**	**304**	**0**	**304**	**0**	**268**	**7**	**275**
Build Volumes	**12**	**3**	**29**	**45**	**123**	**6**	**165**	**294**	**304**	**1108**	**17**	**1429**	**35**	**986**	**91**	**1112**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 4. Mall of Georgia Boulevard / Village Way Lane

Weekday A.M. Peak Hour	Northbound Village Way Lane				Southbound Village Way Lane				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	0	0	0	0	5	0	6	11	22	121	0	143	0	494	20	514
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**0**	**0**	**0**	**0**	**6**	**0**	**7**	**11**	**25**	**136**	**0**	**143**	**0**	**556**	**23**	**514**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	52	0	52	0	37	0	37
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	2	0	0	2	0	58	0	58	0	98	4	102
Destinations Office	0	0	0	0	0	0	0	0	0	63	0	63	0	6	0	6
Destinations Total	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**173**	**0**	**173**	**0**	**141**	**4**	**145**
Build Volumes	**0**	**0**	**0**	**0**	**8**	**0**	**7**	**14**	**25**	**309**	**0**	**334**	**0**	**697**	**27**	**723**

Weekday P.M. Peak Hour	Northbound Village Way Lane				Southbound Village Way Lane				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	3	1	0	4	64	2	82	148	62	715	3	780	7	378	58	443
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**3**	**1**	**0**	**4**	**72**	**2**	**92**	**148**	**70**	**804**	**3**	**780**	**8**	**425**	**65**	**443**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	137	0	137	0	134	0	134
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	3	0	0	3	0	80	0	80	0	56	2	58
Destinations Office	0	0	0	0	0	0	0	0	0	8	0	8	0	57	0	57
Destinations Total	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**225**	**0**	**225**	**0**	**247**	**2**	**249**
Build Volumes	**3**	**1**	**0**	**5**	**75**	**2**	**92**	**170**	**70**	**1029**	**3**	**1103**	**8**	**672**	**67**	**747**

Saturday Afternoon Peak Hour	Northbound Village Way Lane				Southbound Village Way Lane				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 12, 2016)	30	7	7	44	100	0	183	283	145	662	17	824	35	511	89	635
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**34**	**8**	**8**	**44**	**113**	**0**	**206**	**283**	**163**	**745**	**19**	**824**	**39**	**575**	**100**	**635**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	229	0	229	0	188	0	188
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	3	0	0	3	0	79	0	79	0	81	3	84
Destinations Office	0	0	0	0	0	0	0	0	0	5	0	5	0	6	0	6
Destinations Total	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**313**	**0**	**313**	**0**	**275**	**3**	**278**
Build Volumes	**34**	**8**	**8**	**50**	**116**	**0**	**206**	**321**	**163**	**1058**	**19**	**1240**	**39**	**850**	**103**	**992**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 5. Mall of Georgia Boulevard / Trail Path Lane

Weekday A.M. Peak Hour	Northbound Trail Path Lane				Southbound Trail Path Lane				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	4	0	0	4	4	0	4	8	11	125	0	136	4	510	11	525
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**5**	**0**	**0**	**4**	**5**	**0**	**5**	**8**	**12**	**141**	**0**	**136**	**5**	**574**	**12**	**525**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	3	0	0	3	0	52	0	52	0	37	2	39
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	4	0	0	4	0	60	0	60	0	102	6	108
Destinations Office	0	0	0	0	0	0	0	0	0	63	0	63	0	6	0	6
Destinations Total	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**7**	**0**	**175**	**0**	**175**	**0**	**145**	**8**	**153**
Build Volumes	**5**	**0**	**0**	**5**	**12**	**0**	**5**	**16**	**12**	**316**	**0**	**328**	**5**	**719**	**20**	**744**

Weekday P.M. Peak Hour	Northbound Trail Path Lane				Southbound Trail Path Lane				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	2	0	6	8	46	0	46	92	28	829	2	859	12	352	57	421
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**2**	**0**	**7**	**8**	**52**	**0**	**52**	**92**	**32**	**933**	**2**	**859**	**14**	**396**	**64**	**421**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	8	0	0	8	0	137	0	137	0	134	8	142
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	5	0	0	5	0	83	0	83	0	58	4	62
Destinations Office	0	0	0	0	0	0	0	0	0	8	0	8	0	57	0	57
Destinations Total	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**13**	**0**	**228**	**0**	**228**	**0**	**249**	**12**	**261**
Build Volumes	**2**	**0**	**7**	**9**	**65**	**0**	**52**	**117**	**32**	**1161**	**2**	**1194**	**14**	**645**	**76**	**735**

Saturday Afternoon Peak Hour	Northbound Trail Path Lane				Southbound Trail Path Lane				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 12, 2016)	6	2	5	13	121	3	144	268	77	720	5	802	11	489	121	621
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**7**	**2**	**6**	**13**	**136**	**3**	**162**	**268**	**87**	**810**	**6**	**802**	**12**	**550**	**136**	**621**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	13	0	0	13	0	229	0	229	0	188	11	199
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	5	0	0	5	0	82	0	82	0	84	5	89
Destinations Office	0	0	0	0	0	0	0	0	0	5	0	5	0	6	0	6
Destinations Total	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**18**	**0**	**316**	**0**	**316**	**0**	**278**	**16**	**294**
Build Volumes	**7**	**2**	**6**	**15**	**154**	**3**	**162**	**320**	**87**	**1126**	**6**	**1218**	**12**	**828**	**152**	**993**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 6. Mall of Georgia Boulevard / Appaloosa Lane / Destinations Access

Weekday A.M. Peak Hour	Northbound Appaloosa Lane				Southbound Destinations Access				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	61		74	135					0 uturn	119	10	129	45	478		523
Total Annual Background Growth	12.5%		12.5%						12.5%	12.5%	12.5%		12.5%	12.5%		
No-Build Volumes	**69**		**83**	**135**					**0**	**134**	**11**	**129**	**51**	**538**		**523**
Destinations Retail, Restaurants, Grocery, Entertainment	0	6	0	6	15	4	21	40	55	0	0	55	0	12	16	28
-pass-by	0	0	0	0	4	0	9	13	6	-6	0	0	0	-16	16	0
Destinations Residential, Hotel	0	0	0	0	26	0	36	62	64	0	0	64	0	41	5	46
Destinations Office	0	2	0	2	1	0	6	7	63	0	0	63	0	0	10	10
Destinations Total	**0**	**8**	**0**	**8**	**46**	**4**	**72**	**122**	**188**	**-6**	**0**	**182**	**0**	**37**	**47**	**84**
Build Volumes	**69**	**8**	**83**	**160**	**46**	**4**	**72**	**122**	**188**	**128**	**11**	**327**	**51**	**575**	**47**	**672**

Weekday P.M. Peak Hour	Northbound Appaloosa Lane				Southbound Destinations Access				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Tuesday, March 22, 2016)	49		42	91					0 uturn	806	60	866	75	373		448
Total Annual Background Growth	12.5%		12.5%						12.5%	12.5%	12.5%		12.5%	12.5%		
No-Build Volumes	**55**		**47**	**91**					**0**	**907**	**68**	**866**	**84**	**420**		**448**
Destinations Retail, Restaurants, Grocery, Entertainment	0	16	0	16	58	15	78	151	145	0	0	145	0	38	43	81
-pass-by	0	0	0	0	70	0	20	90	72	-72	0	0	0	-24	24	0
Destinations Residential, Hotel	0	0	0	0	15	0	20	35	88	0	0	88	0	28	7	35
Destinations Office	0	1	0	1	7	1	57	65	8	0	0	8	0	0	1	1
Destinations Total	**0**	**17**	**0**	**17**	**150**	**16**	**175**	**341**	**313**	**-72**	**0**	**241**	**0**	**42**	**75**	**117**
Build Volumes	**55**	**17**	**47**	**119**	**150**	**16**	**175**	**341**	**313**	**835**	**68**	**1215**	**84**	**462**	**75**	**621**

Saturday Afternoon Peak Hour	Northbound Appaloosa Lane				Southbound Destinations Access				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 12, 2016)	40		34	74					6 uturn	805	52	863	75	574		649
Total Annual Background Growth	12.5%		12.5%						12.5%	12.5%	12.5%		12.5%	12.5%		
No-Build Volumes	**45**		**38**	**74**					**7**	**906**	**59**	**863**	**84**	**646**		**649**
Destinations Retail, Restaurants, Grocery, Entertainment	0	26	0	26	81	22	109	212	242	0	0	242	0	56	72	128
-pass-by	0	0	0	0	79	0	33	112	95	-95	0	0	0	-47	47	0
Destinations Residential, Hotel	0	0	0	0	21	0	29	50	87	0	0	87	0	35	4	39
Destinations Office	0	0	0	0	1	0	6	7	5	0	0	5	0	0	1	1
Destinations Total	**0**	**26**	**0**	**26**	**182**	**22**	**177**	**381**	**429**	**-95**	**0**	**334**	**0**	**44**	**124**	**168**
Build Volumes	**45**	**26**	**38**	**109**	**182**	**22**	**177**	**381**	**436**	**811**	**59**	**1305**	**84**	**690**	**124**	**898**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 7. Mall of Georgia Boulevard / Woodward Crossing Boulevard / Century Mill Creek Apartments

Weekday A.M. Peak Hour	Northbound Century Mill Creek Apts				Southbound Woodward Crossing Blvd				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	46	17	55	118	9	9	9	27	18	142	31	191	27	457	73	557
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**52**	**19**	**62**	**118**	**10**	**10**	**10**	**27**	**20**	**160**	**35**	**191**	**30**	**514**	**82**	**557**
Destinations Retail, Restaurants, Grocery, Entertainment	4	2	0	6	15	3	0	18	0	14	1	15	0	21	20	41
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	1	0	0	1	17	0	0	17	0	24	2	26	0	14	10	24
Destinations Office	0	2	0	2	3	0	0	3	0	1	0	1	0	10	30	40
Destinations Total	**5**	**4**	**0**	**9**	**35**	**3**	**0**	**38**	**0**	**39**	**3**	**42**	**0**	**45**	**60**	**105**
Build Volumes	**57**	**23**	**62**	**142**	**45**	**13**	**10**	**68**	**20**	**199**	**38**	**257**	**30**	**559**	**142**	**732**

Weekday P.M. Peak Hour	Northbound Century Mill Creek Apts				Southbound Woodward Crossing Blvd				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	30	11	36	77	270	29	50	349	58	727	36	821	53	388	224	665
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**34**	**12**	**41**	**77**	**304**	**33**	**56**	**349**	**65**	**818**	**41**	**821**	**60**	**437**	**252**	**665**
Destinations Retail, Restaurants, Grocery, Entertainment	11	5	0	16	53	10	0	63	0	53	5	58	0	55	55	110
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	2	0	0	2	10	0	0	10	0	14	1	15	0	19	14	33
Destinations Office	0	0	0	0	28	1	0	29	0	7	0	7	0	1	4	5
Destinations Total	**13**	**5**	**0**	**18**	**91**	**11**	**0**	**102**	**0**	**74**	**6**	**80**	**0**	**75**	**73**	**148**
Build Volumes	**47**	**17**	**41**	**105**	**395**	**44**	**56**	**495**	**65**	**892**	**47**	**1004**	**60**	**512**	**325**	**896**

Saturday Afternoon Peak Hour	Northbound Century Mill Creek Apts				Southbound Woodward Crossing Blvd				Eastbound Mall of Georgia Boulevard				Westbound Mall of Georgia Boulevard			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 19, 2016)	12	12	32	56	416	11	69	496	170	612	25	807	24	583	313	920
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**14**	**14**	**36**	**56**	**468**	**12**	**78**	**496**	**191**	**689**	**28**	**807**	**27**	**656**	**352**	**920**
Destinations Retail, Restaurants, Grocery, Entertainment	18	8	0	26	76	16	0	92	0	76	6	82	0	92	92	184
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	2	0	0	2	14	0	0	14	0	19	2	21	0	19	14	33
Destinations Office	0	0	0	0	3	0	0	3	0	1	0	1	0	1	3	4
Destinations Total	**20**	**8**	**0**	**28**	**93**	**16**	**0**	**109**	**0**	**96**	**8**	**104**	**0**	**112**	**109**	**221**
Build Volumes	**34**	**22**	**36**	**91**	**561**	**28**	**78**	**667**	**191**	**785**	**36**	**1012**	**27**	**768**	**461**	**1256**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 8. Gravel Springs Road (SR 324) / Mall of Georgia Boulevard / Cedar Glade Lane

Weekday A.M. Peak Hour	Northbound Mall of Georgia Boulevard				Southbound Cedar Glade Lane				Eastbound SR 324				Westbound SR 324			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	70	7	115	192	11	17	23	51	10	234	62	306	482	869	5	1356
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**79**	**8**	**129**	**192**	**12**	**19**	**26**	**51**	**11**	**263**	**70**	**306**	**542**	**978**	**6**	**1356**
Destinations Retail, Restaurants, Grocery, Entertainment	5	3	21	29	0	4	0	4	0	0	7	7	30	0	0	30
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	10	0	31	41	0	0	0	0	0	0	6	6	18	0	0	18
Destinations Office	1	0	3	4	0	2	0	2	0	0	8	8	30	0	0	30
Destinations Total	**16**	**3**	**55**	**74**	**0**	**6**	**0**	**6**	**0**	**0**	**21**	**21**	**78**	**0**	**0**	**78**
Build Volumes	**95**	**11**	**184**	**290**	**12**	**25**	**26**	**63**	**11**	**263**	**91**	**365**	**620**	**978**	**6**	**1604**

Weekday P.M. Peak Hour	Northbound Mall of Georgia Boulevard				Southbound Cedar Glade Lane				Eastbound SR 324				Westbound SR 324			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	161	15	826	1002	13	9	19	41	6	935	149	1090	426	482	10	918
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**181**	**17**	**929**	**1002**	**15**	**10**	**21**	**41**	**7**	**1052**	**168**	**1090**	**479**	**542**	**11**	**918**
Destinations Retail, Restaurants, Grocery, Entertainment	19	11	76	106	0	12	0	12	0	0	20	20	78	0	0	78
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	6	0	18	24	0	0	0	0	0	0	8	8	25	0	0	25
Destinations Office	7	1	27	35	0	0	0	0	0	0	1	1	4	0	0	4
Destinations Total	**32**	**12**	**121**	**165**	**0**	**12**	**0**	**12**	**0**	**0**	**29**	**29**	**107**	**0**	**0**	**107**
Build Volumes	**213**	**29**	**1050**	**1292**	**15**	**22**	**21**	**58**	**7**	**1052**	**197**	**1255**	**586**	**542**	**11**	**1140**

Saturday Afternoon Peak Hour	Northbound Mall of Georgia Boulevard				Southbound Cedar Glade Lane				Eastbound SR 324				Westbound SR 324			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 19, 2016)	215	15	889	1119	10	13	3	26	8	657	191	856	645	566	7	1218
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**242**	**17**	**1000**	**1119**	**11**	**15**	**3**	**26**	**9**	**739**	**215**	**856**	**726**	**637**	**8**	**1218**
Destinations Retail, Restaurants, Grocery, Entertainment	27	16	108	151	0	20	0	20	0	0	33	33	131	0	0	131
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	8	0	25	33	0	0	0	0	0	0	8	8	25	0	0	25
Destinations Office	1	0	3	4	0	0	0	0	0	0	1	1	3	0	0	3
Destinations Total	**36**	**16**	**136**	**188**	**0**	**20**	**0**	**20**	**0**	**0**	**42**	**42**	**159**	**0**	**0**	**159**
Build Volumes	**278**	**33**	**1136**	**1447**	**11**	**35**	**3**	**49**	**9**	**739**	**257**	**1005**	**885**	**637**	**8**	**1529**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 9. Buford Drive (SR 20) / Woodward Crossing Boulevard

Weekday A.M. Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	8	1499	46	1553	85	1157	16	1258	5	2	2	9	34	3	35	72
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**9**	**1686**	**52**	**1553**	**96**	**1302**	**18**	**1258**	**6**	**2**	**2**	**9**	**38**	**3**	**39**	**72**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	37	0	0	37	0	0	0	0	0	0	26	26
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	25	0	0	25	0	1	0	1	0	2	41	43
Destinations Office	0	0	0	0	45	0	0	45	0	0	0	0	0	0	5	5
Destinations Total	**0**	**0**	**0**	**0**	**107**	**0**	**0**	**107**	**0**	**1**	**0**	**1**	**0**	**2**	**72**	**74**
Build Volumes	**9**	**1686**	**52**	**1747**	**203**	**1302**	**18**	**1522**	**6**	**3**	**2**	**11**	**38**	**5**	**111**	**155**

Weekday P.M. Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	34	1648	153	1835	379	1690	47	2116	55	26	18	99	229	29	176	434
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**38**	**1854**	**172**	**1835**	**426**	**1901**	**53**	**2116**	**62**	**29**	**20**	**99**	**258**	**33**	**198**	**434**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	98	0	0	98	0	0	0	0	0	0	96	96
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	33	0	0	33	0	2	0	2	0	1	24	25
Destinations Office	0	0	0	0	6	0	0	6	0	0	0	0	0	0	40	40
Destinations Total	**0**	**0**	**0**	**0**	**137**	**0**	**0**	**137**	**0**	**2**	**0**	**2**	**0**	**1**	**160**	**161**
Build Volumes	**38**	**1854**	**172**	**2064**	**563**	**1901**	**53**	**2518**	**62**	**31**	**20**	**113**	**258**	**34**	**358**	**649**

Saturday Afternoon Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 19, 2016)	45	1730	265	2040	657	1507	59	2223	77	59	27	163	435	91	323	849
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**51**	**1946**	**298**	**2040**	**739**	**1695**	**66**	**2223**	**87**	**66**	**30**	**163**	**489**	**102**	**363**	**849**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	164	0	0	164	0	0	0	0	0	0	135	135
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	0	0	33	0	0	33	0	2	0	2	0	2	34	36
Destinations Office	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	4
Destinations Total	**0**	**0**	**0**	**0**	**201**	**0**	**0**	**201**	**0**	**2**	**0**	**2**	**0**	**2**	**173**	**175**
Build Volumes	**51**	**1946**	**298**	**2295**	**940**	**1695**	**66**	**2702**	**87**	**68**	**30**	**185**	**489**	**104**	**536**	**1130**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 10. Woodward Crossing Boulevard / Piedmont Court Drive

Weekday A.M. Peak Hour	Northbound Piedmont Court Drive				Southbound Piedmont Court Drive				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	13	2	7	22	4	7	32	43	57	80	24	161	22	60	8	90
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**15**	**2**	**8**	**22**	**5**	**8**	**36**	**43**	**64**	**90**	**27**	**161**	**25**	**68**	**9**	**90**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	37	0	37	0	26	0	26
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	1	1	1	0	0	1	0	26	0	26	2	43	2	47
Destinations Office	0	0	0	0	0	0	0	0	0	45	0	45	0	5	0	5
Destinations Total	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**108**	**0**	**108**	**2**	**74**	**2**	**78**
Build Volumes	**15**	**2**	**9**	**26**	**6**	**8**	**36**	**49**	**64**	**198**	**27**	**289**	**27**	**142**	**11**	**179**

Weekday P.M. Peak Hour	Northbound Piedmont Court Drive				Southbound Piedmont Court Drive				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	104	53	68	225	38	46	139	223	177	223	144	544	40	187	67	294
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**117**	**60**	**77**	**225**	**43**	**52**	**156**	**223**	**199**	**251**	**162**	**544**	**45**	**210**	**75**	**294**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	98	0	98	0	96	0	96
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	2	2	2	0	0	2	0	35	0	35	1	25	1	27
Destinations Office	0	0	0	0	0	0	0	0	0	6	0	6	0	40	0	40
Destinations Total	**0**	**0**	**2**	**2**	**2**	**0**	**0**	**2**	**0**	**139**	**0**	**139**	**1**	**161**	**1**	**163**
Build Volumes	**117**	**60**	**79**	**255**	**45**	**52**	**156**	**253**	**199**	**390**	**162**	**751**	**46**	**371**	**76**	**494**

Saturday Afternoon Peak Hour	Northbound Piedmont Court Drive				Southbound Piedmont Court Drive				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 19, 2016)	193	153	115	461	58	98	308	464	423	328	267	1018	94	339	89	522
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**217**	**172**	**129**	**461**	**65**	**110**	**347**	**464**	**476**	**369**	**300**	**1018**	**106**	**381**	**100**	**522**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	0	0	0	0	0	0	0	164	0	164	0	135	0	135
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	2	2	2	0	0	2	0	35	0	35	2	36	2	40
Destinations Office	0	0	0	0	0	0	0	0	0	4	0	4	0	4	0	4
Destinations Total	**0**	**0**	**2**	**2**	**2**	**0**	**0**	**2**	**0**	**203**	**0**	**203**	**2**	**175**	**2**	**179**
Build Volumes	**217**	**172**	**131**	**521**	**67**	**110**	**347**	**524**	**476**	**572**	**300**	**1348**	**108**	**556**	**102**	**766**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 11. Woodward Crossing Boulevard / Crossing View Road

Weekday A.M. Peak Hour	Northbound Crossing View Road				Southbound Crossing View Road				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	4	1	2	7	8	1	12	21	19	40	14	73	16	70	33	119
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**5**	**1**	**2**	**7**	**9**	**1**	**14**	**21**	**21**	**45**	**16**	**73**	**18**	**79**	**37**	**119**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	3	3	0	0	0	0	0	37	0	37	2	26	0	28
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	2	2	1	0	0	1	0	28	0	28	4	47	2	53
Destinations Office	0	0	0	0	0	0	0	0	0	45	0	45	0	5	0	5
Destinations Total	**0**	**0**	**5**	**5**	**1**	**0**	**0**	**1**	**0**	**110**	**0**	**110**	**6**	**78**	**2**	**86**
Build Volumes	**5**	**1**	**7**	**13**	**10**	**1**	**14**	**25**	**21**	**155**	**16**	**192**	**24**	**157**	**39**	**220**

Weekday P.M. Peak Hour	Northbound Crossing View Road				Southbound Crossing View Road				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, March 23, 2016)	36	18	54	108	109	23	50	182	79	229	20	328	27	188	72	287
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**41**	**20**	**61**	**108**	**123**	**26**	**56**	**182**	**89**	**258**	**23**	**328**	**30**	**212**	**81**	**287**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	8	8	0	0	0	0	0	98	0	98	8	96	0	104
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	3	3	2	0	0	2	0	39	0	39	2	27	1	30
Destinations Office	0	0	0	0	0	0	0	0	0	6	0	6	0	40	0	40
Destinations Total	**0**	**0**	**11**	**11**	**2**	**0**	**0**	**2**	**0**	**143**	**0**	**143**	**10**	**163**	**1**	**174**
Build Volumes	**41**	**20**	**72**	**133**	**125**	**26**	**56**	**207**	**89**	**401**	**23**	**512**	**40**	**375**	**82**	**497**

Saturday Afternoon Peak Hour	Northbound Crossing View Road				Southbound Crossing View Road				Eastbound Woodward Crossing Blvd				Westbound Woodward Crossing Blvd			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, March 19, 2016)	107	86	67	260	178	89	164	431	185	253	65	503	57	245	197	499
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**120**	**97**	**75**	**260**	**200**	**100**	**185**	**431**	**208**	**285**	**73**	**503**	**64**	**276**	**222**	**499**
Destinations Retail, Restaurants, Grocery, Entertainment	0	0	13	13	0	0	0	0	0	164	0	164	11	135	0	146
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	0	0	3	3	2	0	0	2	0	39	0	39	3	40	2	45
Destinations Office	0	0	0	0	0	0	0	0	0	4	0	4	0	4	0	4
Destinations Total	**0**	**0**	**16**	**16**	**2**	**0**	**0**	**2**	**0**	**207**	**0**	**207**	**14**	**179**	**2**	**195**
Build Volumes	**120**	**97**	**91**	**309**	**202**	**100**	**185**	**487**	**208**	**492**	**73**	**773**	**78**	**455**	**224**	**756**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 12. Buford Drive (SR 20) / Gravel Springs Road (SR 324)

Weekday A.M. Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Financial Center Way				Westbound SR 324			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, June 15, 2016)	36	1380	20	1436	240	1088	69	1397	126	21	17	164	87	64	872	1023
balancing	7.0%	7.0%	7.0%		7.0%	7.0%	7.0%		7.0%	7.0%	7.0%		7.0%	7.0%	7.0%	
Existing Balanced Volumes	39	1477	21	1537	257	1164	74	1495	135	22	18	175	93	68	933	1095
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**43**	**1661**	**24**	**1729**	**289**	**1310**	**83**	**1682**	**152**	**25**	**20**	**197**	**105**	**77**	**1050**	**1231**
Destinations Retail, Restaurants, Grocery, Entertainment	2	24	0	26	0	35	0	35	0	0	2	2	0	0	0	0
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	8	33	0	41	6	21	0	27	0	0	4	4	0	0	10	10
Destinations Office	0	5	0	5	8	43	0	51	0	0	2	2	0	0	1	1
Destinations Total	**10**	**62**	**0**	**72**	**14**	**99**	**0**	**113**	**0**	**0**	**8**	**8**	**0**	**0**	**11**	**11**
Build Volumes	**53**	**1723**	**24**	**1801**	**303**	**1409**	**83**	**1795**	**152**	**25**	**28**	**205**	**105**	**77**	**1061**	**1242**

Weekday P.M. Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Financial Center Way				Westbound SR 324			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Wednesday, June 15, 2016)	75	1712	88	1875	844	1916	110	2870	256	140	51	447	114	131	416	661
balancing	1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%	
Existing Balanced Volumes	76	1729	89	1894	852	1935	111	2899	259	141	52	451	115	132	420	668
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**85**	**1945**	**100**	**2130**	**959**	**2177**	**125**	**3261**	**291**	**159**	**58**	**508**	**130**	**149**	**473**	**751**
Destinations Retail, Restaurants, Grocery, Entertainment	3	93	0	96	0	95	0	95	0	0	3	3	0	0	0	0
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	4	20	0	24	8	28	0	36	0	0	5	5	0	0	6	6
Destinations Office	2	38	0	40	1	6	0	7	0	0	0	0	0	0	7	7
Destinations Total	**9**	**151**	**0**	**160**	**9**	**129**	**0**	**138**	**0**	**0**	**8**	**8**	**0**	**0**	**13**	**13**
Build Volumes	**94**	**2096**	**100**	**2290**	**968**	**2306**	**125**	**3399**	**291**	**159**	**66**	**516**	**130**	**149**	**486**	**764**

Saturday Afternoon Peak Hour	Northbound SR 20				Southbound SR 20				Eastbound Financial Center Way				Westbound SR 324			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Saturday, June 18, 2016)	84	1869	73	2026	552	1876	209	2637	370	177	98	645	154	189	489	832
balancing	5.0%	5.0%	5.0%		5.0%	5.0%	5.0%		5.0%	5.0%	5.0%		5.0%	5.0%	5.0%	
Existing Balanced Volumes	88	1962	77	2127	580	1970	219	2769	389	186	103	677	162	198	513	874
Total Annual Background Growth	12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%		12.5%	12.5%	12.5%	
No-Build Volumes	**99**	**2208**	**86**	**2393**	**652**	**2216**	**247**	**3115**	**437**	**209**	**116**	**762**	**182**	**223**	**578**	**983**
Destinations Retail, Restaurants, Grocery, Entertainment	10	125	0	135	0	150	0	150	0	0	14	14	0	0	0	0
-pass-by	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destinations Residential, Hotel	6	28	0	34	8	28	0	36	0	0	5	5	0	0	8	8
Destinations Office	0	4	0	4	1	4	0	5	0	0	0	0	0	0	1	1
Destinations Total	**16**	**157**	**0**	**173**	**9**	**182**	**0**	**191**	**0**	**0**	**19**	**19**	**0**	**0**	**9**	**9**
Build Volumes	**115**	**2365**	**86**	**2566**	**661**	**2398**	**247**	**3306**	**437**	**209**	**135**	**781**	**182**	**223**	**587**	**992**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: 13. Woodward Crossing Boulevard / Destinations Access

Weekday A.M. Peak Hour	**Northbound Destinations Access**				**Eastbound Woodward Crossing Blvd**			**Westbound Woodward Crossing Blvd**		
	L	**R**	**Tot**		**T**	**R**	**Tot**	**L**	**T**	**Tot**
Counted Volumes (Tuesday, January 27, 2015)					**50**		**50**		**119**	**119**
Total Annual Background Growth					12.5%				12.5%	
No-Build Volumes					**56**		**50**		**134**	**119**
Destinations Retail, Restaurants, Grocery, Entertainment	28	12	40		10	30	40	22	0	22
-pass-by	4	2	6		-2	2	0	5	-5	0
Destinations Residential, Hotel	53	14	67		6	25	31	10	0	10
Destinations Office	5	3	8		0	45	45	32	0	32
Destinations Total	**90**	**31**	**121**		**14**	**102**	**116**	**69**	**-5**	**64**
Build Volumes	**90**	**31**	**121**		**70**	**102**	**172**	**69**	**129**	**198**

Weekday P.M. Peak Hour	**Northbound Destinations Access**				**Eastbound Woodward Crossing Blvd**			**Westbound Woodward Crossing Blvd**		
	L	**R**	**Tot**		**T**	**R**	**Tot**	**L**	**T**	**Tot**
Counted Volumes (Tuesday, January 27, 2015)					**392**		**392**		**287**	**287**
Total Annual Background Growth					12.5%				12.5%	
No-Build Volumes					**441**		**392**		**323**	**287**
Destinations Retail, Restaurants, Grocery, Entertainment	104	44	148		26	80	106	60	0	60
-pass-by	25	23	48		-25	25	0	25	-25	0
Destinations Residential, Hotel	30	8	38		9	35	44	14	0	14
Destinations Office	40	29	69		0	6	6	4	0	4
Destinations Total	**199**	**104**	**303**		**10**	**146**	**156**	**103**	**-25**	**78**
Build Volumes	**199**	**104**	**303**		**451**	**146**	**597**	**103**	**298**	**401**

Saturday Afternoon Peak Hour	**Northbound Destinations Access**				**Eastbound Woodward Crossing Blvd**			**Westbound Woodward Crossing Blvd**		
	L	**R**	**Tot**		**T**	**R**	**Tot**	**L**	**T**	**Tot**
Counted Volumes (Saturday, March 19, 2016)					**498**		**498**		**499**	**499**
Total Annual Background Growth					12.5%				12.5%	
No-Build Volumes					**560**		**498**		**561**	**499**
Destinations Retail, Restaurants, Grocery, Entertainment	146	64	210		44	133	177	100	0	100
-pass-by	46	32	78		-42	42	0	56	-56	0
Destinations Residential, Hotel	45	11	56		9	35	44	14	0	14
Destinations Office	4	3	7		0	4	4	3	0	3
Destinations Total	**241**	**110**	**351**		**11**	**214**	**225**	**173**	**-56**	**117**
Build Volumes	**241**	**110**	**351**		**571**	**214**	**785**	**173**	**505**	**678**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: A. Mall of Georgia Boulevard / Destinations RIRO Access A

Weekday A.M. Peak Hour		**Southbound Destinations Access A**		**Eastbound Mall of Georgia Boulevard**		**Westbound Mall of Georgia Boulevard**		
		R	**Tot**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, March 22, 2016)				129	129	539		539
Total Annual Background Growth				12.5%		12.5%		
No-Build Volumes				**145**	**129**	**606**		**539**
Destinations Retail, Restaurants, Grocery, Entertainment		10	10	55	55	29	4	33
-pass-by		4	4	0	0	-3	3	0
Destinations Residential, Hotel		36	36	64	64	72	5	77
Destinations Office		0	0	63	63	6	0	6
Destinations Total		**50**	**50**	**182**	**182**	**104**	**12**	**116**
Build Volumes		**50**	**50**	**327**	**327**	**710**	**12**	**722**

Weekday P.M. Peak Hour		**Southbound Destinations Access A**		**Eastbound Mall of Georgia Boulevard**		**Westbound Mall of Georgia Boulevard**		
		R	**Tot**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, March 22, 2016)				866	866	422		422
Total Annual Background Growth				12.5%		12.5%		
No-Build Volumes				**974**	**866**	**475**		**422**
Destinations Retail, Restaurants, Grocery, Entertainment		36	36	145	145	109	10	119
-pass-by		9	9	0	0	-6	6	0
Destinations Residential, Hotel		21	21	88	88	41	7	48
Destinations Office		0	0	8	8	57	0	57
Destinations Total		**66**	**66**	**241**	**241**	**201**	**23**	**224**
Build Volumes		**66**	**66**	**1215**	**1215**	**676**	**23**	**699**

Saturday Afternoon Peak Hour		**Southbound Destinations Access A**		**Eastbound Mall of Georgia Boulevard**		**Westbound Mall of Georgia Boulevard**		
		R	**Tot**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Saturday, March 12, 2016)				863	863	620		620
Total Annual Background Growth				12.5%		12.5%		
No-Build Volumes				**971**	**863**	**698**		**620**
Destinations Retail, Restaurants, Grocery, Entertainment		50	50	242	242	149	16	165
-pass-by		15	15	0	0	-11	11	0
Destinations Residential, Hotel		30	30	87	87	59	5	64
Destinations Office		0	0	5	5	6	0	6
Destinations Total		**95**	**95**	**334**	**334**	**203**	**32**	**235**
Build Volumes		**95**	**95**	**1305**	**1305**	**901**	**32**	**933**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

Intersection: B. Mall of Georgia Boulevard / Destinations RIRO Access B

Weekday A.M. Peak Hour		**Southbound Destinations Access B**		**Eastbound Mall of Georgia Boulevard**		**Westbound Mall of Georgia Boulevard**		
		R	**Tot**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, March 22, 2016)				193	193	523		523
Total Annual Background Growth				12.5%		12.5%		
No-Build Volumes				**217**	**193**	**588**		**523**
Destinations Retail, Restaurants, Grocery, Entertainment		8	8	15	15	20	5	25
-pass-by		3	3	0	0	-5	5	0
Destinations Residential, Hotel		36	36	26	26	10	5	15
Destinations Office		0	0	1	1	10	0	10
Destinations Total		**47**	**47**	**42**	**42**	**35**	**15**	**50**
Build Volumes		**47**	**47**	**259**	**259**	**623**	**15**	**638**

Weekday P.M. Peak Hour		**Southbound Destinations Access B**		**Eastbound Mall of Georgia Boulevard**		**Westbound Mall of Georgia Boulevard**		
		R	**Tot**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, March 22, 2016)				848	848	448		448
Total Annual Background Growth				12.5%		12.5%		
No-Build Volumes				**954**	**848**	**504**		**448**
Destinations Retail, Restaurants, Grocery, Entertainment		28	28	58	58	53	13	66
-pass-by		7	7	0	0	-7	7	0
Destinations Residential, Hotel		21	21	15	15	14	7	21
Destinations Office		0	0	7	7	1	0	1
Destinations Total		**56**	**56**	**80**	**80**	**61**	**27**	**88**
Build Volumes		**56**	**56**	**1034**	**1034**	**565**	**27**	**592**

Saturday Afternoon Peak Hour		**Southbound Destinations Access B**		**Eastbound Mall of Georgia Boulevard**		**Westbound Mall of Georgia Boulevard**		
		R	**Tot**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Saturday, March 12, 2016)				839	839	649		649
Total Annual Background Growth				12.5%		12.5%		
No-Build Volumes				**944**	**839**	**730**		**649**
Destinations Retail, Restaurants, Grocery, Entertainment		40	40	81	81	88	22	110
-pass-by		12	12	0	0	-15	15	0
Destinations Residential, Hotel		30	30	21	21	9	5	14
Destinations Office		0	0	7	7	1	0	1
Destinations Total		**82**	**82**	**109**	**109**	**83**	**42**	**125**
Build Volumes		**82**	**82**	**1053**	**1053**	**813**	**42**	**855**

Destinations Traffic Impact Study
Gwinnett County, Georgia

June 2016

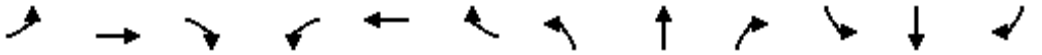
Intersection: C. Woodward Crossing Boulevard / Destinations RIRO Access C

Weekday A.M. Peak Hour	**Northbound Destinations Access C**			**Eastbound Woodward Crossing Blvd**			**Westbound Woodward Crossing Blvd**	
	R	**Tot**		**T**	**R**	**Tot**	**T**	**Tot**
Counted Volumes (Tuesday, January 27, 2015)				**50**		**50**	**119**	**119**
Total Annual Background Growth				12.5%			12.5%	
No-Build Volumes				**56**		**50**	**134**	**119**
Destinations Retail, Restaurants, Grocery, Entertainment	6	6		12	10	22	20	20
-pass-by	0	0		0	0	0	0	0
Destinations Residential, Hotel	3	3		14	6	20	10	10
Destinations Office	0	0		3	0	3	32	32
Destinations Total	**9**	**9**		**29**	**16**	**45**	**62**	**62**
Build Volumes	**9**	**9**		**85**	**16**	**101**	**196**	**196**

Weekday P.M. Peak Hour	**Northbound Destinations Access C**			**Eastbound Woodward Crossing Blvd**			**Westbound Woodward Crossing Blvd**	
	R	**Tot**		**T**	**R**	**Tot**	**T**	**Tot**
Counted Volumes (Tuesday, January 27, 2015)				**392**		**392**	**287**	**287**
Total Annual Background Growth				12.5%			12.5%	
No-Build Volumes				**441**		**392**	**323**	**287**
Destinations Retail, Restaurants, Grocery, Entertainment	19	19		44	26	70	60	60
-pass-by	10	10		-8	8	0	0	0
Destinations Residential, Hotel	2	2		8	9	17	14	14
Destinations Office	0	0		29	0	29	4	4
Destinations Total	**31**	**31**		**73**	**43**	**116**	**78**	**78**
Build Volumes	**31**	**31**		**514**	**43**	**557**	**401**	**401**

Saturday Afternoon Peak Hour	**Northbound Destinations Access C**			**Eastbound Woodward Crossing Blvd**			**Westbound Woodward Crossing Blvd**	
	R	**Tot**		**T**	**R**	**Tot**	**T**	**Tot**
Counted Volumes (Saturday, March 19, 2016)				**498**		**498**	**499**	**499**
Total Annual Background Growth				12.5%			12.5%	
No-Build Volumes				**560**		**498**	**561**	**499**
Destinations Retail, Restaurants, Grocery, Entertainment	28	28		64	44	108	100	100
-pass-by	14	14		-14	14	0	0	0
Destinations Residential, Hotel	2	2		11	9	20	14	14
Destinations Office	0	0		3	0	3	3	3
Destinations Total	**44**	**44**		**64**	**67**	**131**	**117**	**117**
Build Volumes	**44**	**44**		**624**	**67**	**691**	**678**	**678**

Appendix D
Existing Condition Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	15	94	452	21	23	102	1576	169	18	1141	28
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	44	16	103	497	23	25	112	1732	186	20	1254	31
Adj No. of Lanes	2	1	1	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	142	121	559	303	257	152	2980	1102	246	3213	79
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.04	0.53	0.53	0.14	0.63	0.63
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	3548	5588	1583	1774	5105	126
Grp Volume(v), veh/h	44	16	103	497	23	25	112	1732	186	20	833	452
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1863	1583	1774	1695	1840
Q Serve(g_s), s	2.2	1.4	11.6	25.4	1.9	2.4	5.6	37.7	7.3	1.8	21.7	21.7
Cycle Q Clear(g_c), s	2.2	1.4	11.6	25.4	1.9	2.4	5.6	37.7	7.3	1.8	21.7	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	263	142	121	559	303	257	152	2980	1102	246	2134	1158
V/C Ratio(X)	0.17	0.11	0.85	0.89	0.08	0.10	0.74	0.58	0.17	0.08	0.39	0.39
Avail Cap(c_a), veh/h	344	186	158	803	435	369	256	2980	1102	246	2134	1158
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	0.72	0.72	0.72	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.8	77.4	82.1	73.8	63.9	64.1	85.1	28.4	9.4	67.5	16.4	16.4
Incr Delay (d2), s/veh	0.3	0.3	27.4	6.6	0.1	0.1	6.8	0.8	0.3	0.1	0.5	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	1.0	0.8	6.0	12.7	1.0	1.1	2.9	19.6	5.0	0.9	10.3	11.4
LnGrp Delay(d),s/veh	78.1	77.8	109.5	80.4	64.0	64.3	91.9	29.2	9.8	67.6	16.9	17.4
LnGrp LOS	E	E	F	F	E	E	F	C	A	E	B	B
Approach Vol, veh/h		163			545			2030			1305	
Approach Delay, s/veh		97.9			78.9			30.9			17.9	
Approach LOS		F			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	29.0	100.0		17.8	11.7	117.3		33.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	96.0		18.0	13.0	91.0		42.0
Max Q Clear Time (g_c+I1), s	3.8	39.7		13.6	7.6	23.7		27.4
Green Ext Time (p_c), s	1.4	24.0		0.2	0.1	12.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	45	188	0	2	432	26	3	2	0	12	0	9
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	48	200	0	2	475	29	5	3	0	27	0	20
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.63	0.63	0.63	0.44	0.44	0.44
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	848	379	304	714	43	946	1164	0	959	1164	989
Arrive On Green	0.01	0.08	0.00	0.00	0.07	0.07	0.62	0.62	0.00	0.62	0.00	0.62
Sat Flow, veh/h	1774	3539	1583	1774	3389	206	1386	1863	0	1408	1863	1583
Grp Volume(v), veh/h	48	200	0	2	247	257	5	3	0	27	0	20
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1826	1386	1863	0	1408	1863	1583
Q Serve(g_s), s	1.9	4.8	0.0	0.1	12.3	12.3	0.1	0.1	0.0	0.7	0.0	0.4
Cycle Q Clear(g_c), s	1.9	4.8	0.0	0.1	12.3	12.3	0.1	0.1	0.0	0.7	0.0	0.4
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	848	379	304	373	385	946	1164	0	959	1164	989
V/C Ratio(X)	0.24	0.24	0.00	0.01	0.66	0.67	0.01	0.00	0.00	0.03	0.00	0.02
Avail Cap(c_a), veh/h	402	1770	792	457	786	812	946	1164	0	959	1164	989
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.69	0.69	0.69	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.7	33.7	0.0	28.0	38.8	38.8	6.4	6.3	0.0	6.5	0.0	6.4
Incr Delay (d2), s/veh	0.6	0.1	0.0	0.0	1.4	1.4	0.0	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	1.0	2.4	0.0	0.0	6.2	6.4	0.0	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	28.3	33.9	0.0	28.0	40.2	40.2	6.4	6.3	0.0	6.5	0.0	6.4
LnGrp LOS	C	C		C	D	D	A	A		A		A
Approach Vol, veh/h		248			506			8			47	
Approach Delay, s/veh		32.8			40.1			6.4			6.5	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.2	4.2	25.6		60.2	6.8	23.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	8.0	45.0		25.0	13.0	40.0
Max Q Clear Time (g_c+I1), s		2.1	2.1	6.8		2.7	3.9	14.3
Green Ext Time (p_c), s		0.1	0.0	4.9		0.1	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	29	159	0	7	489	7	0	1	0	1	0	6
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	33	183	0	8	589	8	0	4	0	1	0	7
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.25	0.25	0.25	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	840	376	320	788	11	0	1157	0	953	0	984
Arrive On Green	0.01	0.08	0.00	0.02	0.44	0.44	0.00	0.62	0.00	0.62	0.00	0.62
Sat Flow, veh/h	1774	3539	1583	1774	3575	49	0	1863	0	1405	0	1583
Grp Volume(v), veh/h	33	183	0	8	291	306	0	4	0	1	0	7
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1854	0	1863	0	1405	0	1583
Q Serve(g_s), s	1.3	4.4	0.0	0.3	12.4	12.4	0.0	0.1	0.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	1.3	4.4	0.0	0.3	12.4	12.4	0.0	0.1	0.0	0.1	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.03	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	840	376	320	390	409	0	1157	0	953	0	984
V/C Ratio(X)	0.17	0.22	0.00	0.02	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h	345	1888	844	503	944	989	0	1157	0	953	0	984
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.70	0.70	0.70	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.5	33.6	0.0	26.7	23.1	23.1	0.0	6.5	0.0	6.5	0.0	6.5
Incr Delay (d2), s/veh	0.4	0.1	0.0	0.0	2.0	1.9	0.0	0.0	0.0	0.0	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	0.7	2.2	0.0	0.2	6.2	6.5	0.0	0.0	0.0	0.0	0.0	0.1
LnGrp Delay(d),s/veh	27.9	33.8	0.0	26.7	25.1	25.0	0.0	6.5	0.0	6.5	0.0	6.5
LnGrp LOS	C	C		C	C	C		A		A		A
Approach Vol, veh/h		216			605			4			8	
Approach Delay, s/veh		32.9			25.1			6.5			6.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		59.9	4.7	25.4		59.9	6.2	23.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	10.0	48.0		20.0	10.0	48.0
Max Q Clear Time (g_c+I1), s		2.1	2.3	6.4		2.2	3.3	14.4
Green Ext Time (p_c), s		0.0	0.0	5.6		0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	121	0	0	494	20	0	0	0	5	0	6
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	28	155	0	0	588	24	0	0	0	9	0	11
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.25	0.25	0.25	0.55	0.55	0.55
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1113	0	386	876	392	80	1111	0	922	0	945
Arrive On Green	0.01	0.10	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.60	0.00	0.60
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1398	1863	0	1412	0	1583
Grp Volume(v), veh/h	28	155	0	0	588	24	0	0	0	9	0	11
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1583	1398	1863	0	1412	0	1583
Q Serve(g_s), s	1.0	3.6	0.0	0.0	14.5	1.3	0.0	0.0	0.0	0.2	0.0	0.3
Cycle Q Clear(g_c), s	1.0	3.6	0.0	0.0	14.5	1.3	0.0	0.0	0.0	0.2	0.0	0.3
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	1113	0	386	876	392	80	1111	0	922	0	945
V/C Ratio(X)	0.15	0.14	0.00	0.00	0.67	0.06	0.00	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	347	2124	0	463	1888	844	80	1111	0	922	0	945
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.00	0.69	0.69	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	29.3	0.0	0.0	37.8	31.7	0.0	0.0	0.0	7.4	0.0	7.4
Incr Delay (d2), s/veh	0.4	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	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	0.5	1.8	0.0	0.0	7.2	0.6	0.0	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	25.2	29.3	0.0	0.0	38.4	31.7	0.0	0.0	0.0	7.4	0.0	7.4
LnGrp LOS	C	C			D	C				A		A
Approach Vol, veh/h		183			612			0			20	
Approach Delay, s/veh		28.7			38.1			0.0			7.4	
Approach LOS		C			D						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.7	0.0	32.3		57.7	6.0	26.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	4.0	54.0		20.0	10.0	48.0
Max Q Clear Time (g_c+I1), s		0.0	0.0	5.6		2.3	3.0	16.5
Green Ext Time (p_c), s		0.0	0.0	6.1		0.0	0.0	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	125	0	4	510	11	4	0	0	4	0	4
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	14	154	0	5	630	14	8	0	0	6	0	6
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.50	0.50	0.50	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	866	0	340	838	375	944	1149	0	951	0	977
Arrive On Green	0.00	0.08	0.00	0.01	0.47	0.47	0.62	0.00	0.00	0.62	0.00	0.62
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1404	1863	0	1412	0	1583
Grp Volume(v), veh/h	14	154	0	5	630	14	8	0	0	6	0	6
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1583	1404	1863	0	1412	0	1583
Q Serve(g_s), s	0.5	3.7	0.0	0.2	13.1	0.4	0.2	0.0	0.0	0.1	0.0	0.1
Cycle Q Clear(g_c), s	0.5	3.7	0.0	0.2	13.1	0.4	0.3	0.0	0.0	0.1	0.0	0.1
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	866	0	340	838	375	944	1149	0	951	0	977
V/C Ratio(X)	0.08	0.18	0.00	0.01	0.75	0.04	0.01	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	329	1966	0	488	1927	862	944	1149	0	951	0	977
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.7	32.9	0.0	25.8	21.5	18.2	6.7	0.0	0.0	6.6	0.0	6.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	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	0.3	1.8	0.0	0.1	6.5	0.2	0.1	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	26.9	33.0	0.0	25.9	22.9	18.2	6.7	0.0	0.0	6.6	0.0	6.6
LnGrp LOS	C	C		C	C	B	A			A		A
Approach Vol, veh/h		168			649			8			12	
Approach Delay, s/veh		32.5			22.9			6.7			6.6	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		59.5	4.5	26.0		59.5	5.2	25.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	8.0	50.0		20.0	9.0	49.0
Max Q Clear Time (g_c+I1), s		2.3	2.2	5.7		2.1	2.5	15.1
Green Ext Time (p_c), s		0.0	0.0	6.4		0.0	0.0	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	119	10	45	478	0	61	0	74	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	83	83	86	86	92	77	92	77	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	143	12	52	556	0	79	0	96	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	556	0	0	155	0	0	532	809	78
Stage 1	-	-	-	-	-	-	149	149	-
Stage 2	-	-	-	-	-	-	383	660	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	1011	-	-	1423	-	-	477	313	967
Stage 1	-	-	-	-	-	-	863	773	-
Stage 2	-	-	-	-	-	-	659	458	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1011	-	-	1423	-	-	460	0	967
Mov Cap-2 Maneuver	-	-	-	-	-	-	460	0	-
Stage 1	-	-	-	-	-	-	863	0	-
Stage 2	-	-	-	-	-	-	635	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	460	967	1011	-	-	1423	-	-
HCM Lane V/C Ratio	0.172	0.099	-	-	-	0.037	-	-
HCM Control Delay (s)	14.4	9.1	0	-	-	7.6	-	-
HCM Lane LOS	B	A	A	-	-	A	-	-
HCM 95th %tile Q(veh)	0.6	0.3	0	-	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	142	31	27	457	73	46	17	55	9	9	9
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	23	182	40	31	519	83	52	19	62	16	16	16
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.89	0.89	0.89	0.56	0.56	0.56
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	609	131	295	759	340	67	1068	908	50	1026	872
Arrive On Green	0.01	0.07	0.07	0.02	0.21	0.21	0.04	0.57	0.57	0.01	0.55	0.55
Sat Flow, veh/h	1774	2899	623	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	23	110	112	31	519	83	52	19	62	16	16	16
Grp Sat Flow(s),veh/h/ln	1774	1770	1753	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	0.9	5.3	5.5	1.2	12.1	3.9	2.6	0.4	1.6	0.4	0.4	0.4
Cycle Q Clear(g_c), s	0.9	5.3	5.5	1.2	12.1	3.9	2.6	0.4	1.6	0.4	0.4	0.4
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	372	368	295	759	340	67	1068	908	50	1026	872
V/C Ratio(X)	0.13	0.29	0.31	0.11	0.68	0.24	0.78	0.02	0.07	0.32	0.02	0.02
Avail Cap(c_a), veh/h	302	688	682	410	1376	616	237	1068	908	268	1026	872
HCM Platoon Ratio	0.33	0.33	0.33	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	28.2	35.5	35.6	27.0	32.5	29.3	42.9	8.3	8.5	43.9	9.2	9.2
Incr Delay (d2), s/veh	0.3	0.4	0.5	0.2	1.1	0.4	17.4	0.0	0.1	3.5	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	0.5	2.6	2.7	0.6	6.0	1.7	1.6	0.2	0.7	0.2	0.2	0.2
LnGrp Delay(d),s/veh	28.5	36.0	36.1	27.2	33.6	29.7	60.4	8.3	8.7	47.4	9.2	9.2
LnGrp LOS	C	D	D	C	C	C	E	A	A	D	A	A
Approach Vol, veh/h		245			633			133			48	
Approach Delay, s/veh		35.3			32.8			28.8			22.0	
Approach LOS		D			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	5.3	55.6	6.2	22.9	7.4	53.5	5.7	23.3
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	24.0	8.0	35.0	12.0	19.0	8.0	35.0
Max Q Clear Time (g_c+I1), s	2.4	3.6	3.2	7.5	4.6	2.4	2.9	14.1
Green Ext Time (p_c), s	0.0	0.3	0.0	5.6	0.0	0.3	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	234	62	482	869	5	70	7	115	11	17	23
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	263	70	502	905	5	89	9	146	13	20	27
Adj No. of Lanes	1	2	1	2	2	1	1	1	1	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.96	0.96	0.96	0.79	0.79	0.79	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	644	288	623	1246	558	742	938	798	695	363	489
Arrive On Green	0.01	0.18	0.18	0.18	0.35	0.35	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1353	1863	1583	1227	720	972
Grp Volume(v), veh/h	11	263	70	502	905	5	89	9	146	13	0	47
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1353	1863	1583	1227	0	1691
Q Serve(g_s), s	0.6	5.9	3.4	12.6	20.0	0.2	3.2	0.2	4.5	0.5	0.0	1.3
Cycle Q Clear(g_c), s	0.6	5.9	3.4	12.6	20.0	0.2	4.5	0.2	4.5	0.7	0.0	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	19	644	288	623	1246	558	742	938	798	695	0	852
V/C Ratio(X)	0.58	0.41	0.24	0.81	0.73	0.01	0.12	0.01	0.18	0.02	0.00	0.06
Avail Cap(c_a), veh/h	138	944	422	1185	1888	844	742	938	798	695	0	852
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	0.00	1.00
Uniform Delay (d), s/veh	44.3	32.5	31.5	35.3	25.4	18.9	12.5	11.1	12.2	11.3	0.0	11.4
Incr Delay (d2), s/veh	25.0	0.4	0.4	2.5	0.8	0.0	0.3	0.0	0.5	0.0	0.0	0.1
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	0.4	2.9	1.5	6.2	9.9	0.1	1.3	0.1	2.1	0.2	0.0	0.6
LnGrp Delay(d),s/veh	69.4	32.9	31.9	37.9	26.2	19.0	12.9	11.2	12.7	11.4	0.0	11.5
LnGrp LOS	E	C	C	D	C	B	B	B	B	B		B
Approach Vol, veh/h		344			1412			244			60	
Approach Delay, s/veh		33.9			30.3			12.7			11.5	
Approach LOS		C			C			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		49.3	20.3	20.4		49.3	5.0	35.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	31.0	24.0		23.0	7.0	48.0
Max Q Clear Time (g_c+I1), s		6.5	14.6	7.9		3.3	2.6	22.0
Green Ext Time (p_c), s		1.0	1.7	7.7		1.0	0.0	9.7

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	2	2	34	3	35	8	1499	46	85	1157	16
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	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	7	3	3	45	0	50	9	1629	50	87	1181	16
Adj No. of Lanes	1	1	1	2	0	2	1	3	0	2	3	0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.92	0.92	0.92	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	40	34	75	0	82	279	4219	129	125	3677	50
Arrive On Green	0.02	0.02	0.02	0.02	0.00	0.03	0.16	0.83	0.83	0.04	0.71	0.71
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	5070	156	3442	5171	70
Grp Volume(v), veh/h	7	3	3	45	0	50	9	1089	590	87	774	423
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1835	1721	1695	1850
Q Serve(g_s), s	0.7	0.3	0.3	2.3	0.0	2.6	0.8	14.3	14.3	4.5	15.4	15.4
Cycle Q Clear(g_c), s	0.7	0.3	0.3	2.3	0.0	2.6	0.8	14.3	14.3	4.5	15.4	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	30	40	34	75	0	82	279	2821	1527	125	2411	1316
V/C Ratio(X)	0.24	0.08	0.09	0.60	0.00	0.61	0.03	0.39	0.39	0.69	0.32	0.32
Avail Cap(c_a), veh/h	79	228	194	118	0	352	279	2821	1527	306	2411	1316
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	0.99	0.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	87.4	86.4	86.4	87.3	0.0	73.0	64.2	3.7	3.7	85.7	9.7	9.7
Incr Delay (d2), s/veh	4.0	0.8	1.1	7.3	0.0	7.2	0.0	0.4	0.7	6.7	0.4	0.6
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	0.4	0.2	0.2	1.2	0.0	1.2	0.4	6.8	7.5	2.3	7.3	8.1
LnGrp Delay(d),s/veh	91.4	87.2	87.5	94.6	0.0	80.1	64.3	4.1	4.5	92.5	10.1	10.4
LnGrp LOS	F	F	F	F		F	E	A	A	F	B	B
Approach Vol, veh/h		13			95			1688			1284	
Approach Delay, s/veh		89.5			87.0			4.6			15.8	
Approach LOS		F			F			A			B	

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	10.5	153.8	7.8	7.8	32.3	132.0	7.0	8.6
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	16.0	120.0	6.0	22.0	8.0	128.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	6.5	16.3	4.3	2.3	2.8	17.4	2.7	4.6
Green Ext Time (p_c), s	0.1	21.7	0.0	0.0	0.2	11.4	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

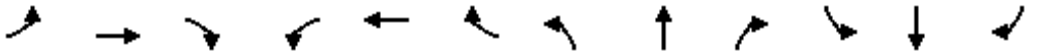
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	57	80	24	22	60	8	13	2	7	4	7	32
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	80	113	34	28	75	10	31	5	17	5	8	39
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.71	0.71	0.71	0.80	0.80	0.80	0.42	0.42	0.42	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	304	136	183	236	30	1098	1413	1201	1129	1342	1201
Arrive On Green	0.06	0.09	0.09	0.02	0.05	0.05	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1774	3539	1583	1774	4563	586	1353	1863	1583	1384	1770	1583
Grp Volume(v), veh/h	80	113	34	28	55	30	31	5	17	5	8	39
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1759	1353	1863	1583	1384	1770	1583
Q Serve(g_s), s	3.7	2.7	1.8	1.3	1.4	1.5	0.5	0.1	0.2	0.1	0.1	0.5
Cycle Q Clear(g_c), s	3.7	2.7	1.8	1.3	1.4	1.5	1.1	0.1	0.2	0.1	0.1	0.5
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	304	136	183	175	91	1098	1413	1201	1129	1342	1201
V/C Ratio(X)	0.35	0.37	0.25	0.15	0.31	0.33	0.03	0.00	0.01	0.00	0.01	0.03
Avail Cap(c_a), veh/h	599	1219	545	439	829	430	1098	1413	1201	1129	1342	1201
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)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	38.8	38.4	39.2	41.1	41.2	2.8	2.6	2.7	2.6	2.6	2.7
Incr Delay (d2), s/veh	0.8	0.7	0.9	0.4	1.0	2.1	0.0	0.0	0.0	0.0	0.0	0.1
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	1.9	1.3	0.8	0.7	0.7	0.8	0.2	0.0	0.1	0.0	0.0	0.3
LnGrp Delay(d),s/veh	37.3	39.5	39.3	39.6	42.2	43.3	2.9	2.6	2.7	2.7	2.6	2.7
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		227			113			53			52	
Approach Delay, s/veh		38.7			41.8			2.8			2.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		72.3	6.0	11.7		72.3	9.1	8.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0	15.0	31.0		32.0	24.0	22.0
Max Q Clear Time (g_c+I1), s		3.1	3.3	4.7		2.5	5.7	3.5
Green Ext Time (p_c), s		0.4	0.0	1.3		0.4	0.2	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	40	14	16	70	33	4	1	2	8	1	12
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	57	20	20	88	41	7	2	3	9	1	14
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.70	0.70	0.70	0.80	0.80	0.80	0.58	0.58	0.58	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	166	56	166	210	94	1174	1463	1244	1184	1463	1244
Arrive On Green	0.02	0.06	0.06	0.02	0.06	0.06	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1774	2607	871	1774	3539	1583	1393	1863	1583	1405	1863	1583
Grp Volume(v), veh/h	27	38	39	20	88	41	7	2	3	9	1	14
Grp Sat Flow(s),veh/h/ln	1774	1770	1709	1774	1770	1583	1393	1863	1583	1405	1863	1583
Q Serve(g_s), s	1.3	1.8	2.0	0.9	2.2	2.3	0.1	0.0	0.0	0.1	0.0	0.2
Cycle Q Clear(g_c), s	1.3	1.8	2.0	0.9	2.2	2.3	0.1	0.0	0.0	0.1	0.0	0.2
Prop In Lane	1.00		0.51	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	113	109	166	210	94	1174	1463	1244	1184	1463	1244
V/C Ratio(X)	0.17	0.34	0.36	0.12	0.42	0.44	0.01	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	519	649	627	529	1298	581	1174	1463	1244	1184	1463	1244
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	38.6	40.3	40.4	38.8	40.8	40.9	2.1	2.1	2.1	2.1	2.1	2.1
Incr Delay (d2), s/veh	0.5	1.7	2.0	0.3	1.3	3.2	0.0	0.0	0.0	0.0	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	0.6	1.0	1.0	0.5	1.1	1.1	0.0	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	39.1	42.0	42.4	39.1	42.2	44.0	2.1	2.1	2.1	2.1	2.1	2.1
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		104			149			12			24	
Approach Delay, s/veh		41.4			42.3			2.1			2.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.7	5.6	9.7		74.7	6.0	9.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	20.0	33.0		25.0	20.0	33.0
Max Q Clear Time (g_c+I1), s		2.1	2.9	4.0		2.2	3.3	4.3
Green Ext Time (p_c), s		0.1	0.0	1.1		0.1	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	36.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	135	22	18	93	68	933	39	1477	21	257	1164	74
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	148	24	20	109	80	1098	43	1641	23	268	1212	77
Adj No. of Lanes	2	1	0	1	1	2	1	3	1	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	36	30	652	610	1163	151	2237	696	310	2172	138
Arrive On Green	0.05	0.04	0.04	0.34	0.33	0.33	0.09	0.44	0.44	0.09	0.44	0.44
Sat Flow, veh/h	3476	950	792	1774	1863	2787	1774	5085	1583	3442	4888	310
Grp Volume(v), veh/h	148	0	44	109	80	1098	43	1641	23	268	841	448
Grp Sat Flow(s),veh/h/ln	1738	0	1741	1774	1863	1393	1774	1695	1583	1721	1695	1808
Q Serve(g_s), s	7.6	0.0	4.5	3.2	5.4	54.1	4.1	48.0	0.5	13.8	33.0	33.0
Cycle Q Clear(g_c), s	7.6	0.0	4.5	3.2	5.4	54.1	4.1	48.0	0.5	13.8	33.0	33.0
Prop In Lane	1.00		0.45	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	187	0	65	652	610	1163	151	2237	696	310	1507	804
V/C Ratio(X)	0.79	0.00	0.67	0.17	0.13	0.94	0.28	0.73	0.03	0.87	0.56	0.56
Avail Cap(c_a), veh/h	232	0	668	652	642	1210	151	2237	696	382	1507	804
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	0.00	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	84.2	0.0	85.5	39.2	42.5	32.6	77.2	41.7	2.7	80.8	36.9	36.9
Incr Delay (d2), s/veh	13.8	0.0	11.5	0.1	0.1	14.2	1.0	2.2	0.1	15.8	1.5	2.8
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	4.0	0.0	2.4	3.7	2.8	23.1	2.0	22.9	0.2	7.3	15.7	17.1
LnGrp Delay(d),s/veh	98.0	0.0	97.0	39.3	42.6	46.8	78.2	43.9	2.8	96.6	38.4	39.7
LnGrp LOS	F		F	D	D	D	E	D	A	F	D	D
Approach Vol, veh/h		192			1287			1707			1557	
Approach Delay, s/veh		97.8			45.9			44.2			48.8	
Approach LOS		F			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	20.2	83.2	65.9	10.7	19.4	84.0	13.7	63.0
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	20.0	70.0	5.0	69.0	10.0	80.0	12.0	62.0
Max Q Clear Time (g_c+I1), s	15.8	50.0	5.2	6.5	6.1	35.0	9.6	56.1
Green Ext Time (p_c), s	0.4	12.5	0.0	0.3	1.2	12.1	0.1	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	48.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	151	163	269	422	118	57	496	1756	743	43	1702	124
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	174	187	309	454	127	61	517	2014	651	45	1773	129
Adj No. of Lanes	2	1	1	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	459	248	211	506	274	233	565	3074	1103	143	2283	166
Arrive On Green	0.13	0.13	0.13	0.25	0.25	0.25	0.16	0.55	0.55	0.08	0.47	0.47
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	3548	5588	1583	1774	4840	351
Grp Volume(v), veh/h	174	187	309	454	127	61	517	2014	651	45	1241	661
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1863	1583	1774	1695	1801
Q Serve(g_s), s	8.3	17.4	24.0	23.0	10.5	5.6	25.8	45.6	38.1	4.3	54.9	55.2
Cycle Q Clear(g_c), s	8.3	17.4	24.0	23.0	10.5	5.6	25.8	45.6	38.1	4.3	54.9	55.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	459	248	211	506	274	233	565	3074	1103	143	1599	850
V/C Ratio(X)	0.38	0.75	1.46	0.90	0.46	0.26	0.92	0.66	0.59	0.31	0.78	0.78
Avail Cap(c_a), veh/h	459	248	211	593	321	273	631	3074	1103	143	1599	850
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.2	75.1	78.0	66.6	61.9	60.1	74.5	28.5	14.0	78.0	39.6	39.7
Incr Delay (d2), s/veh	0.5	12.2	232.8	12.8	1.0	0.5	17.1	1.1	2.3	1.2	3.8	7.0
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	4.0	9.8	24.1	11.8	5.4	2.5	14.1	23.8	25.3	2.2	26.5	29.0
LnGrp Delay(d),s/veh	71.7	87.3	310.8	79.5	62.9	60.5	91.6	29.6	16.4	79.2	43.4	46.6
LnGrp LOS	E	F	F	E	E	E	F	C	B	E	D	D
Approach Vol, veh/h		670			642			3182			1947	
Approach Delay, s/veh		186.3			74.4			37.0			45.3	
Approach LOS		F			E			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	18.6	103.0		28.0	32.6	88.9		30.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	99.0		24.0	32.0	77.0		31.0
Max Q Clear Time (g_c+I1), s	6.3	47.6		26.0	27.8	57.2		25.0
Green Ext Time (p_c), s	1.4	34.2		0.0	0.8	13.8		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	58.8
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	199	749	5	11	427	51	30	2	6	88	15	111
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	224	842	6	12	469	56	44	3	9	102	17	129
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.89	0.89	0.89	0.91	0.91	0.91	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	1285	575	188	832	99	683	202	607	762	917	779
Arrive On Green	0.04	0.12	0.12	0.00	0.09	0.09	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	3539	1583	1774	3187	379	1237	411	1234	1397	1863	1583
Grp Volume(v), veh/h	224	842	6	12	260	265	44	0	12	102	17	129
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1796	1237	0	1645	1397	1863	1583
Q Serve(g_s), s	7.8	20.5	0.3	0.4	12.7	12.8	1.7	0.0	0.3	3.6	0.4	4.1
Cycle Q Clear(g_c), s	7.8	20.5	0.3	0.4	12.7	12.8	2.1	0.0	0.3	4.0	0.4	4.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	385	1285	575	188	462	469	683	0	810	762	917	779
V/C Ratio(X)	0.58	0.66	0.01	0.06	0.56	0.57	0.06	0.00	0.01	0.13	0.02	0.17
Avail Cap(c_a), veh/h	598	1809	809	286	610	619	683	0	810	762	917	779
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.87	0.87	0.87	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	34.2	25.4	24.9	36.2	36.2	12.3	0.0	11.7	12.7	11.7	12.6
Incr Delay (d2), s/veh	1.1	0.4	0.0	0.1	0.9	0.9	0.2	0.0	0.0	0.4	0.0	0.5
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	3.9	10.1	0.1	0.2	6.3	6.5	0.6	0.0	0.2	1.5	0.2	1.8
LnGrp Delay(d),s/veh	23.2	34.7	25.4	25.0	37.1	37.2	12.4	0.0	11.7	13.1	11.7	13.1
LnGrp LOS	C	C	C	C	D	D	B		B	B	B	B
Approach Vol, veh/h		1072			537			56			248	
Approach Delay, s/veh		32.2			36.9			12.3			13.0	
Approach LOS		C			D			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		48.3	5.0	36.7		48.3	14.2	27.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	46.0		26.0	21.0	31.0
Max Q Clear Time (g_c+I1), s		4.1	2.4	22.5		6.1	9.8	14.8
Green Ext Time (p_c), s		1.0	0.0	10.2		1.0	0.5	8.4

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	93	783	5	14	427	20	8	0	14	44	1	48
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	98	824	5	15	449	21	10	0	18	53	1	58
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.79	0.79	0.79	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	1092	489	198	916	43	322	24	525	827	15	862
Arrive On Green	0.11	0.62	0.62	0.00	0.09	0.09	0.54	0.00	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1774	3539	1583	1774	3443	161	492	44	964	1374	27	1583
Grp Volume(v), veh/h	98	824	5	15	230	240	28	0	0	54	0	58
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1834	1500	0	0	1401	0	1583
Q Serve(g_s), s	3.5	15.0	0.1	0.6	11.2	11.2	0.0	0.0	0.0	0.8	0.0	1.6
Cycle Q Clear(g_c), s	3.5	15.0	0.1	0.6	11.2	11.2	0.7	0.0	0.0	1.5	0.0	1.6
Prop In Lane	1.00		1.00	1.00		0.09	0.36		0.64	0.98		1.00
Lane Grp Cap(c), veh/h	310	1092	489	198	471	488	870	0	0	842	0	862
V/C Ratio(X)	0.32	0.75	0.01	0.08	0.49	0.49	0.03	0.00	0.00	0.06	0.00	0.07
Avail Cap(c_a), veh/h	447	1927	862	311	865	897	870	0	0	842	0	862
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.91	0.91	0.91	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.3	14.8	11.9	24.5	35.2	35.2	9.5	0.0	0.0	9.7	0.0	9.7
Incr Delay (d2), s/veh	0.5	0.9	0.0	0.1	0.7	0.7	0.1	0.0	0.0	0.1	0.0	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	1.7	7.2	0.0	0.3	5.6	5.8	0.3	0.0	0.0	0.7	0.0	0.7
LnGrp Delay(d),s/veh	20.8	15.7	11.9	24.6	35.9	35.9	9.6	0.0	0.0	9.8	0.0	9.9
LnGrp LOS	C	B	B	C	D	D	A			A		A
Approach Vol, veh/h		927			485			28			112	
Approach Delay, s/veh		16.2			35.6			9.6			9.8	
Approach LOS		B			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		53.0	5.3	31.8		53.0	9.1	28.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		22.0	7.0	49.0		22.0	12.0	44.0
Max Q Clear Time (g_c+I1), s		2.7	2.6	17.0		3.6	5.5	13.2
Green Ext Time (p_c), s		0.5	0.0	10.8		0.5	0.1	10.6

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	715	3	7	378	58	3	1	0	64	2	82
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	66	761	3	8	411	63	6	2	0	81	3	104
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.50	0.50	0.50	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	1018	4	180	883	395	786	1075	0	869	31	914
Arrive On Green	0.08	0.56	0.56	0.02	0.50	0.50	0.58	0.58	0.00	0.58	0.58	0.58
Sat Flow, veh/h	1774	3616	14	1774	3539	1583	1281	1863	0	1369	53	1583
Grp Volume(v), veh/h	66	372	392	8	411	63	6	2	0	84	0	104
Grp Sat Flow(s),veh/h/ln	1774	1770	1860	1774	1770	1583	1281	1863	0	1422	0	1583
Q Serve(g_s), s	2.4	14.3	14.3	0.3	6.8	1.9	0.2	0.0	0.0	2.3	0.0	2.7
Cycle Q Clear(g_c), s	2.4	14.3	14.3	0.3	6.8	1.9	2.6	0.0	0.0	2.4	0.0	2.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.00	0.96		1.00
Lane Grp Cap(c), veh/h	310	498	524	180	883	395	786	1075	0	899	0	914
V/C Ratio(X)	0.21	0.75	0.75	0.04	0.47	0.16	0.01	0.00	0.00	0.09	0.00	0.11
Avail Cap(c_a), veh/h	417	865	909	284	1612	721	786	1075	0	899	0	914
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.95	0.95	0.95	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.3	17.2	17.2	25.4	18.6	17.4	9.1	8.1	0.0	8.5	0.0	8.6
Incr Delay (d2), s/veh	0.2	1.5	1.5	0.1	0.4	0.2	0.0	0.0	0.0	0.2	0.0	0.3
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	1.2	7.0	7.4	0.2	3.4	0.9	0.1	0.0	0.0	1.0	0.0	1.2
LnGrp Delay(d),s/veh	22.5	18.8	18.7	25.5	19.0	17.6	9.1	8.1	0.0	8.8	0.0	8.9
LnGrp LOS	C	B	B	C	B	B	A	A		A		A
Approach Vol, veh/h		830			482			8			188	
Approach Delay, s/veh		19.0			18.9			8.9			8.8	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.9	4.7	29.3		55.9	7.6	26.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		28.0	6.0	44.0		28.0	9.0	41.0
Max Q Clear Time (g_c+I1), s		4.6	2.3	16.3		4.7	4.4	8.8
Green Ext Time (p_c), s		0.8	0.0	9.0		0.8	0.0	9.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	28	829	2	12	352	57	2	0	6	46	0	46
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	30	882	2	14	409	66	3	0	9	52	0	52
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.86	0.86	0.86	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	1143	3	191	1081	483	777	0	852	830	0	852
Arrive On Green	0.05	0.63	0.63	0.03	0.61	0.61	0.54	0.00	0.54	0.54	0.00	0.54
Sat Flow, veh/h	1774	3623	8	1774	3539	1583	1347	0	1583	1393	0	1583
Grp Volume(v), veh/h	30	431	453	14	409	66	3	0	9	52	0	52
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1583	1347	0	1583	1393	0	1583
Q Serve(g_s), s	1.0	15.7	15.7	0.5	5.3	1.6	0.1	0.0	0.2	1.6	0.0	1.4
Cycle Q Clear(g_c), s	1.0	15.7	15.7	0.5	5.3	1.6	1.9	0.0	0.2	1.9	0.0	1.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	347	559	588	191	1081	483	777	0	852	830	0	852
V/C Ratio(X)	0.09	0.77	0.77	0.07	0.38	0.14	0.00	0.00	0.01	0.06	0.00	0.06
Avail Cap(c_a), veh/h	424	963	1013	286	1927	862	777	0	852	830	0	852
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.3	14.3	14.3	22.0	13.2	12.5	10.5	0.0	9.7	10.1	0.0	9.9
Incr Delay (d2), s/veh	0.1	1.5	1.4	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1
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	7.7	8.0	0.2	2.5	0.7	0.0	0.0	0.1	0.7	0.0	0.6
LnGrp Delay(d),s/veh	20.4	15.8	15.7	22.2	13.4	12.6	10.5	0.0	9.7	10.2	0.0	10.1
LnGrp LOS	C	B	B	C	B	B	B		A	B		B
Approach Vol, veh/h		914			489			12			104	
Approach Delay, s/veh		15.9			13.6			9.9			10.2	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.4	5.2	32.4		52.4	6.1	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	6.0	49.0		23.0	6.0	49.0
Max Q Clear Time (g_c+I1), s		3.9	2.5	17.7		3.9	3.0	7.3
Green Ext Time (p_c), s		0.4	0.0	10.7		0.4	0.0	11.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	806	60	75	373	0	49	0	42	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	91	91	92	81	92	81	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	840	62	82	410	0	60	0	52	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	410	0	0	902	0	0	1241	1446	451
Stage 1	-	-	-	-	-	-	871	871	-
Stage 2	-	-	-	-	-	-	370	575	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	1145	-	-	749	-	-	167	131	556
Stage 1	-	-	-	-	-	-	370	367	-
Stage 2	-	-	-	-	-	-	669	501	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1145	-	-	749	-	-	149	0	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	0	-
Stage 1	-	-	-	-	-	-	370	0	-
Stage 2	-	-	-	-	-	-	596	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	29.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	149	556	1145	-	-	749	-	-
HCM Lane V/C Ratio	0.406	0.093	-	-	-	0.11	-	-
HCM Control Delay (s)	44.8	12.1	0	-	-	10.4	-	-
HCM Lane LOS	E	B	A	-	-	B	-	-
HCM 95th %tile Q(veh)	1.8	0.3	0	-	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	727	36	53	388	224	30	11	36	270	29	50
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	62	773	38	54	396	229	43	16	52	278	30	52
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.98	0.98	0.98	0.69	0.69	0.69	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1046	51	207	1066	477	54	707	601	363	846	719
Arrive On Green	0.04	0.30	0.30	0.03	0.30	0.30	0.03	0.38	0.38	0.11	0.45	0.45
Sat Flow, veh/h	1774	3434	169	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	62	398	413	54	396	229	43	16	52	278	30	52
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	2.2	18.2	18.2	1.9	7.9	10.6	2.2	0.5	1.9	7.1	0.8	1.7
Cycle Q Clear(g_c), s	2.2	18.2	18.2	1.9	7.9	10.6	2.2	0.5	1.9	7.1	0.8	1.7
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	539	558	207	1066	477	54	707	601	363	846	719
V/C Ratio(X)	0.20	0.74	0.74	0.26	0.37	0.48	0.79	0.02	0.09	0.77	0.04	0.07
Avail Cap(c_a), veh/h	329	669	692	267	1416	633	158	707	601	535	846	719
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	20.8	28.1	28.1	22.5	24.8	25.7	43.3	17.5	17.9	39.2	13.6	13.9
Incr Delay (d2), s/veh	0.3	3.4	3.3	0.7	0.2	0.8	22.0	0.1	0.3	3.9	0.1	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	1.1	9.4	9.7	0.9	3.9	4.7	1.4	0.3	0.9	3.6	0.4	0.8
LnGrp Delay(d),s/veh	21.1	31.4	31.3	23.2	25.0	26.5	65.3	17.5	18.2	43.0	13.7	14.1
LnGrp LOS	C	C	C	C	C	C	E	B	B	D	B	B
Approach Vol, veh/h		873			679			111			360	
Approach Delay, s/veh		30.7			25.3			36.4			36.4	
Approach LOS		C			C			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	13.5	38.1	7.0	31.4	6.8	44.9	7.3	31.1
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	14.0	20.0	6.0	34.0	8.0	26.0	4.0	36.0
Max Q Clear Time (g_c+I1), s	9.1	3.9	3.9	20.2	4.2	3.7	4.2	12.6
Green Ext Time (p_c), s	0.4	0.4	0.0	7.2	0.0	0.5	0.0	9.6

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	935	149	426	482	10	161	15	826	13	9	19
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	6	954	152	439	497	10	168	16	860	18	12	26
Adj No. of Lanes	1	2	1	2	2	1	1	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	11	983	440	459	1433	641	684	849	721	364	239	518
Arrive On Green	0.01	0.28	0.28	0.13	0.40	0.40	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1364	1863	1583	630	525	1137
Grp Volume(v), veh/h	6	954	152	439	497	10	168	16	860	18	0	38
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1364	1863	1583	630	0	1662
Q Serve(g_s), s	0.3	24.0	6.9	11.4	8.7	0.3	7.0	0.4	41.0	1.5	0.0	1.1
Cycle Q Clear(g_c), s	0.3	24.0	6.9	11.4	8.7	0.3	8.2	0.4	41.0	1.9	0.0	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	11	983	440	459	1433	641	684	849	721	364	0	757
V/C Ratio(X)	0.55	0.97	0.35	0.96	0.35	0.02	0.25	0.02	1.19	0.05	0.00	0.05
Avail Cap(c_a), veh/h	79	983	440	459	1433	641	684	849	721	364	0	757
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	0.00	1.00
Uniform Delay (d), s/veh	44.6	32.1	26.0	38.7	18.5	16.0	15.9	13.5	24.5	14.0	0.0	13.7
Incr Delay (d2), s/veh	36.2	21.7	0.5	31.1	0.1	0.0	0.9	0.0	99.9	0.3	0.0	0.1
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	0.3	14.6	3.1	7.4	4.3	0.1	2.8	0.2	37.9	0.3	0.0	0.6
LnGrp Delay(d),s/veh	80.8	53.9	26.4	69.8	18.7	16.0	16.8	13.5	124.4	14.2	0.0	13.8
LnGrp LOS	F	D	C	E	B	B	B	B	F	B		B
Approach Vol, veh/h		1112			946			1044			56	
Approach Delay, s/veh		50.3			42.4			105.4			13.9	
Approach LOS		D			D			F			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.0	16.0	29.0		45.0	4.6	40.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		41.0	12.0	25.0		41.0	4.0	33.0
Max Q Clear Time (g_c+I1), s		43.0	13.4	26.0		3.9	2.3	10.7
Green Ext Time (p_c), s		0.0	0.0	0.0		5.6	0.0	11.7

Intersection Summary	
HCM 2010 Ctrl Delay	65.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	55	26	18	229	29	176	34	1648	153	379	1690	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	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	58	27	19	246	0	210	35	1682	156	399	1779	49
Adj No. of Lanes	1	1	1	2	0	2	1	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.98	0.98	0.98	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	48	41	306	0	216	274	3164	293	451	3279	90
Arrive On Green	0.04	0.03	0.03	0.09	0.00	0.07	0.15	0.67	0.67	0.13	0.64	0.64
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	4737	438	3442	5088	140
Grp Volume(v), veh/h	58	27	19	246	0	210	35	1203	635	399	1185	643
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1785	1721	1695	1838
Q Serve(g_s), s	5.8	2.6	2.1	12.3	0.0	9.7	3.1	32.9	33.0	20.5	34.4	34.4
Cycle Q Clear(g_c), s	5.8	2.6	2.1	12.3	0.0	9.7	3.1	32.9	33.0	20.5	34.4	34.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.08
Lane Grp Cap(c), veh/h	78	48	41	306	0	216	274	2265	1193	451	2185	1185
V/C Ratio(X)	0.75	0.56	0.46	0.80	0.00	0.97	0.13	0.53	0.53	0.88	0.54	0.54
Avail Cap(c_a), veh/h	138	166	141	434	0	422	274	2265	1193	631	2185	1185
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	0.92	0.00	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.1	86.7	86.4	80.8	0.0	55.1	65.6	15.4	15.4	76.9	17.5	17.5
Incr Delay (d2), s/veh	13.1	9.8	8.0	6.7	0.0	21.6	0.2	0.9	1.7	10.7	1.0	1.8
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	3.1	1.5	1.0	6.3	0.0	4.9	1.5	15.7	16.8	10.4	16.3	17.9
LnGrp Delay(d),s/veh	98.2	96.5	94.4	87.4	0.0	76.7	65.8	16.3	17.1	87.6	18.5	19.3
LnGrp LOS	F	F	F	F		E	E	B	B	F	B	B
Approach Vol, veh/h		104			456			1873			2227	
Approach Delay, s/veh		97.0			82.5			17.5			31.1	
Approach LOS		F			F			B			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	27.6	124.2	19.5	8.7	31.8	120.0	11.9	16.3
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	33.0	93.0	22.0	16.0	10.0	116.0	14.0	24.0
Max Q Clear Time (g_c+I1), s	22.5	35.0	14.3	4.6	5.1	36.4	7.8	11.7
Green Ext Time (p_c), s	1.1	23.8	0.6	0.1	0.1	25.0	0.5	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	177	223	144	40	187	67	104	53	68	38	46	139
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	197	248	160	45	212	76	117	60	76	40	48	146
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	731	327	248	446	149	781	1173	997	851	1115	997
Arrive On Green	0.12	0.21	0.21	0.03	0.12	0.12	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1774	3539	1583	1774	3772	1259	1184	1863	1583	1248	1770	1583
Grp Volume(v), veh/h	197	248	160	45	189	99	117	60	76	40	48	146
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1641	1184	1863	1583	1248	1770	1583
Q Serve(g_s), s	8.3	5.4	8.0	2.0	4.7	5.1	4.0	1.1	1.7	1.1	0.9	3.4
Cycle Q Clear(g_c), s	8.3	5.4	8.0	2.0	4.7	5.1	7.4	1.1	1.7	2.2	0.9	3.4
Prop In Lane	1.00		1.00	1.00		0.77	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	731	327	248	401	194	781	1173	997	851	1115	997
V/C Ratio(X)	0.55	0.34	0.49	0.18	0.47	0.51	0.15	0.05	0.08	0.05	0.04	0.15
Avail Cap(c_a), veh/h	600	1455	651	353	829	401	781	1173	997	851	1115	997
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)	0.54	0.54	0.54	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	30.5	31.5	33.5	37.1	37.2	8.3	6.4	6.5	6.8	6.3	6.8
Incr Delay (d2), s/veh	0.7	0.1	0.6	0.3	0.9	2.1	0.4	0.1	0.1	0.1	0.1	0.3
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	4.1	2.6	3.6	1.0	2.3	2.4	1.4	0.6	0.8	0.4	0.5	1.5
LnGrp Delay(d),s/veh	28.9	30.6	32.1	33.8	37.9	39.3	8.7	6.5	6.6	6.9	6.4	7.1
LnGrp LOS	C	C	C	C	D	D	A	A	A	A	A	A
Approach Vol, veh/h		605			333			253			234	
Approach Delay, s/veh		30.4			37.8			7.5			6.9	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.7	6.7	22.6		60.7	14.7	14.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		33.0	8.0	37.0		33.0	23.0	22.0
Max Q Clear Time (g_c+I1), s		9.4	4.0	10.0		5.4	10.3	7.1
Green Ext Time (p_c), s		2.4	0.0	4.3		2.4	0.4	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	79	229	20	27	188	72	36	18	54	109	23	50
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	93	269	24	33	227	87	43	21	64	124	26	57
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.84	0.84	0.84	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	515	46	212	425	190	971	1276	1085	971	1276	1085
Arrive On Green	0.06	0.16	0.16	0.02	0.12	0.12	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1774	3290	291	1774	3539	1583	1310	1863	1583	1307	1863	1583
Grp Volume(v), veh/h	93	144	149	33	227	87	43	21	64	124	26	57
Grp Sat Flow(s),veh/h/ln	1774	1770	1811	1774	1770	1583	1310	1863	1583	1307	1863	1583
Q Serve(g_s), s	4.0	6.7	6.8	1.5	5.4	4.6	1.0	0.3	1.2	3.0	0.4	1.1
Cycle Q Clear(g_c), s	4.0	6.7	6.8	1.5	5.4	4.6	1.4	0.3	1.2	3.3	0.4	1.1
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	277	284	212	425	190	971	1276	1085	971	1276	1085
V/C Ratio(X)	0.37	0.52	0.53	0.16	0.53	0.46	0.04	0.02	0.06	0.13	0.02	0.05
Avail Cap(c_a), veh/h	439	629	644	365	1062	475	971	1276	1085	971	1276	1085
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	31.0	34.8	34.9	33.6	37.2	36.9	4.7	4.5	4.6	5.0	4.5	4.6
Incr Delay (d2), s/veh	0.9	1.5	1.5	0.3	1.0	1.7	0.1	0.0	0.1	0.3	0.0	0.1
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	2.0	3.4	3.5	0.7	2.7	2.1	0.4	0.2	0.6	1.1	0.2	0.5
LnGrp Delay(d),s/veh	31.9	36.3	36.4	33.9	38.3	38.6	4.8	4.5	4.8	5.3	4.6	4.7
LnGrp LOS	C	D	D	C	D	D	A	A	A	A	A	A
Approach Vol, veh/h		386			347			128			207	
Approach Delay, s/veh		35.3			37.9			4.7			5.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		65.7	6.2	18.1		65.7	9.5	14.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0	10.0	32.0		36.0	15.0	27.0
Max Q Clear Time (g_c+I1), s		3.4	3.5	8.8		5.3	6.0	7.4
Green Ext Time (p_c), s		1.2	0.0	3.5		1.2	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	259	141	52	115	132	420	76	1729	89	852	1935	111
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	273	148	55	131	150	477	78	1764	91	906	2059	118
Adj No. of Lanes	2	1	0	1	1	2	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.88	0.88	0.88	0.98	0.98	0.98	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	169	63	189	207	1174	96	2034	633	1067	3230	184
Arrive On Green	0.09	0.13	0.13	0.07	0.11	0.11	0.05	0.40	0.40	0.31	0.66	0.66
Sat Flow, veh/h	3476	1309	486	1774	1863	2787	1774	5085	1583	3442	4923	281
Grp Volume(v), veh/h	273	0	203	131	150	477	78	1764	91	906	1415	762
Grp Sat Flow(s),veh/h/ln	1738	0	1795	1774	1863	1393	1774	1695	1583	1721	1695	1813
Q Serve(g_s), s	14.0	0.0	20.0	11.7	14.0	4.2	7.8	57.4	5.3	44.4	44.3	44.8
Cycle Q Clear(g_c), s	14.0	0.0	20.0	11.7	14.0	4.2	7.8	57.4	5.3	44.4	44.3	44.8
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	312	0	231	189	207	1174	96	2034	633	1067	2225	1190
V/C Ratio(X)	0.87	0.00	0.88	0.69	0.72	0.41	0.82	0.87	0.14	0.85	0.64	0.64
Avail Cap(c_a), veh/h	348	0	249	189	207	1174	148	2034	633	1067	2225	1190
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	0.00	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	80.9	0.0	77.0	65.7	77.3	20.7	84.3	49.6	22.3	58.1	18.3	18.3
Incr Delay (d2), s/veh	19.8	0.0	26.7	10.4	11.8	0.2	17.9	5.3	0.5	6.6	1.4	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	7.6	0.0	11.6	6.3	7.9	6.0	4.3	27.8	2.4	22.1	21.1	23.3
LnGrp Delay(d),s/veh	100.7	0.0	103.7	76.1	89.1	20.9	102.2	54.9	22.8	64.7	19.7	21.0
LnGrp LOS	F		F	E	F	C	F	D	C	E	B	C
Approach Vol, veh/h		476			758			1933			3083	
Approach Delay, s/veh		102.0			44.0			55.3			33.2	
Approach LOS		F			D			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	59.8	76.0	17.0	27.2	13.7	122.1	20.2	24.0
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	54.0	72.0	13.0	25.0	15.0	111.0	18.0	20.0
Max Q Clear Time (g_c+I1), s	46.4	59.4	13.7	22.0	9.8	46.8	16.0	16.0
Green Ext Time (p_c), s	3.7	9.5	0.0	1.2	0.1	44.5	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	46.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	417	433	892	741	285	72	930	2489	649	109	1795	236
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	439	456	939	814	313	79	959	2566	669	114	1870	246
Adj No. of Lanes	2	1	1	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	880	476	405	593	321	273	631	2453	968	79	1392	182
Arrive On Green	0.26	0.26	0.26	0.06	0.06	0.06	0.18	0.44	0.44	0.04	0.31	0.31
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	3548	5588	1583	1774	4554	594
Grp Volume(v), veh/h	439	456	939	814	313	79	959	2566	669	114	1388	728
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1863	1583	1774	1695	1758
Q Serve(g_s), s	19.6	43.4	46.0	31.0	30.2	8.6	32.0	79.0	51.2	8.0	55.0	55.0
Cycle Q Clear(g_c), s	19.6	43.4	46.0	31.0	30.2	8.6	32.0	79.0	51.2	8.0	55.0	55.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	880	476	405	593	321	273	631	2453	968	79	1036	537
V/C Ratio(X)	0.50	0.96	2.32	1.37	0.98	0.29	1.52	1.05	0.69	1.45	1.34	1.36
Avail Cap(c_a), veh/h	880	476	405	593	321	273	631	2453	968	79	1036	537
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.69	0.69	0.69	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	66.0	67.0	84.9	84.5	74.3	74.0	50.5	23.6	86.0	62.5	62.5
Incr Delay (d2), s/veh	0.4	30.7	602.0	175.3	35.2	0.4	242.2	31.7	4.0	258.2	159.5	171.8
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	9.4	26.5	87.8	29.2	18.8	3.8	36.9	47.8	33.4	9.6	48.7	52.3
LnGrp Delay(d),s/veh	57.6	96.7	669.0	260.2	119.7	74.7	316.2	82.2	27.6	344.2	222.0	234.3
LnGrp LOS	E	F	F	F	F	E	F	F	C	F	F	F
Approach Vol, veh/h		1834			1206			4194			2230	
Approach Delay, s/veh		380.4			211.6			127.0			232.3	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	83.0		50.0	36.0	59.0		35.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	79.0		46.0	32.0	55.0		31.0
Max Q Clear Time (g_c+I1), s	10.0	81.0		48.0	34.0	57.0		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		211.7
HCM 2010 LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	343	828	10	24	733	94	35	9	17	137	13	282
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	354	854	10	24	748	96	46	12	22	154	15	317
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.98	0.98	0.98	0.76	0.76	0.76	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	1596	714	292	989	127	488	233	428	604	737	626
Arrive On Green	0.16	0.45	0.45	0.01	0.10	0.10	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1774	3539	1583	1774	3156	405	1044	590	1082	1369	1863	1583
Grp Volume(v), veh/h	354	854	10	24	419	425	46	0	34	154	15	317
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1791	1044	0	1672	1369	1863	1583
Q Serve(g_s), s	11.4	15.7	0.3	0.8	20.7	20.8	2.5	0.0	1.1	7.0	0.4	13.6
Cycle Q Clear(g_c), s	11.4	15.7	0.3	0.8	20.7	20.8	3.0	0.0	1.1	8.2	0.4	13.6
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	414	1596	714	292	554	561	488	0	661	604	737	626
V/C Ratio(X)	0.86	0.54	0.01	0.08	0.76	0.76	0.09	0.00	0.05	0.25	0.02	0.51
Avail Cap(c_a), veh/h	607	1966	880	335	590	597	488	0	661	604	737	626
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.39	0.71	0.71	0.71	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	17.9	13.7	20.6	37.0	37.0	17.5	0.0	16.8	19.3	16.6	20.6
Incr Delay (d2), s/veh	3.4	0.1	0.0	0.1	3.8	3.7	0.4	0.0	0.1	1.0	0.1	2.9
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	5.9	7.6	0.1	0.4	10.8	10.9	0.8	0.0	0.5	2.8	0.2	6.4
LnGrp Delay(d),s/veh	22.3	18.0	13.7	20.7	40.8	40.8	17.9	0.0	16.9	20.3	16.6	23.5
LnGrp LOS	C	B	B	C	D	D	B		B	C	B	C
Approach Vol, veh/h		1218			868			80			486	
Approach Delay, s/veh		19.2			40.2			17.5			22.2	
Approach LOS		B			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.6	5.8	44.6		39.6	18.2	32.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	4.0	50.0		24.0	24.0	30.0
Max Q Clear Time (g_c+I1), s		5.0	2.8	17.7		15.6	13.4	22.8
Green Ext Time (p_c), s		2.0	0.0	15.3		1.4	0.8	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	270	715	15	31	638	75	11	3	26	101	5	147
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	278	737	15	34	709	83	13	4	31	122	6	177
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.90	0.90	0.90	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	404	1418	634	331	929	109	203	82	427	668	31	698
Arrive On Green	0.27	0.80	0.80	0.05	0.58	0.58	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1774	3539	1583	1774	3193	374	345	186	969	1339	70	1583
Grp Volume(v), veh/h	278	737	15	34	393	399	48	0	0	128	0	177
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1797	1500	0	0	1410	0	1583
Q Serve(g_s), s	9.6	6.4	0.2	1.2	15.0	15.0	0.0	0.0	0.0	1.9	0.0	6.3
Cycle Q Clear(g_c), s	9.6	6.4	0.2	1.2	15.0	15.0	1.5	0.0	0.0	4.3	0.0	6.3
Prop In Lane	1.00		1.00	1.00		0.21	0.27		0.65	0.95		1.00
Lane Grp Cap(c), veh/h	404	1418	634	331	515	523	712	0	0	699	0	698
V/C Ratio(X)	0.69	0.52	0.02	0.10	0.76	0.76	0.07	0.00	0.00	0.18	0.00	0.25
Avail Cap(c_a), veh/h	598	2006	897	365	649	659	712	0	0	699	0	698
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.85	0.85	0.85	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	6.0	5.4	20.9	16.5	16.5	14.5	0.0	0.0	15.2	0.0	15.9
Incr Delay (d2), s/veh	1.9	0.3	0.0	0.1	3.5	3.5	0.2	0.0	0.0	0.6	0.0	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	4.7	2.9	0.1	0.6	7.7	7.8	0.7	0.0	0.0	2.0	0.0	2.9
LnGrp Delay(d),s/veh	17.8	6.3	5.4	21.0	20.0	20.0	14.7	0.0	0.0	15.8	0.0	16.7
LnGrp LOS	B	A	A	C	C	B	B			B		B
Approach Vol, veh/h		1030			826			48			305	
Approach Delay, s/veh		9.4			20.0			14.7			16.3	
Approach LOS		A			C			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		43.7	6.3	40.1		43.7	16.2	30.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	4.0	51.0		23.0	22.0	33.0
Max Q Clear Time (g_c+I1), s		3.5	3.2	8.4		8.3	11.6	17.0
Green Ext Time (p_c), s		1.5	0.0	14.6		1.4	0.6	9.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	145	662	17	35	511	89	30	7	7	100	0	183
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	149	682	18	35	516	90	38	9	9	120	0	220
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.99	0.99	0.99	0.79	0.79	0.79	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1078	28	215	886	396	641	458	458	816	0	847
Arrive On Green	0.03	0.10	0.10	0.01	0.08	0.08	0.53	0.53	0.53	0.53	0.00	0.53
Sat Flow, veh/h	1774	3523	93	1774	3539	1583	1156	856	856	1376	0	1583
Grp Volume(v), veh/h	149	342	358	35	516	90	38	0	18	120	0	220
Grp Sat Flow(s),veh/h/ln	1774	1770	1846	1774	1770	1583	1156	0	1712	1376	0	1583
Q Serve(g_s), s	5.3	16.7	16.7	1.3	12.6	4.8	1.6	0.0	0.4	4.0	0.0	6.8
Cycle Q Clear(g_c), s	5.3	16.7	16.7	1.3	12.6	4.8	6.0	0.0	0.4	4.4	0.0	6.8
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	314	542	565	215	886	396	641	0	915	816	0	847
V/C Ratio(X)	0.47	0.63	0.63	0.16	0.58	0.23	0.06	0.00	0.02	0.15	0.00	0.26
Avail Cap(c_a), veh/h	465	806	841	287	1258	563	641	0	915	816	0	847
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.88	0.88	0.88	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.3	35.6	35.6	25.3	36.8	33.1	12.3	0.0	9.8	10.9	0.0	11.3
Incr Delay (d2), s/veh	1.0	1.1	1.1	0.3	0.5	0.3	0.2	0.0	0.0	0.4	0.0	0.7
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	2.7	8.4	8.7	0.7	6.3	2.1	0.5	0.0	0.2	1.6	0.0	3.1
LnGrp Delay(d),s/veh	24.3	36.7	36.7	25.6	37.3	33.4	12.5	0.0	9.9	11.3	0.0	12.1
LnGrp LOS	C	D	D	C	D	C	B		A	B		B
Approach Vol, veh/h		849			641			56			340	
Approach Delay, s/veh		34.5			36.1			11.7			11.8	
Approach LOS		C			D			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		52.1	6.3	31.5		52.1	11.4	26.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	6.0	41.0		31.0	15.0	32.0
Max Q Clear Time (g_c+I1), s		8.0	3.3	18.7		8.8	7.3	14.6
Green Ext Time (p_c), s		1.7	0.0	8.8		1.6	0.2	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	720	5	11	489	121	6	2	5	121	3	144
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	84	783	5	11	509	126	11	4	9	139	3	166
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.54	0.54	0.54	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1085	7	200	928	415	688	284	638	837	17	879
Arrive On Green	0.10	0.60	0.60	0.01	0.18	0.18	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1774	3605	23	1774	3539	1583	1211	511	1149	1364	31	1583
Grp Volume(v), veh/h	84	384	404	11	509	126	11	0	13	142	0	166
Grp Sat Flow(s),veh/h/ln	1774	1770	1859	1774	1770	1583	1211	0	1660	1395	0	1583
Q Serve(g_s), s	3.0	13.8	13.8	0.4	11.8	6.2	0.4	0.0	0.3	4.5	0.0	4.7
Cycle Q Clear(g_c), s	3.0	13.8	13.8	0.4	11.8	6.2	5.2	0.0	0.3	4.8	0.0	4.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.69	0.98		1.00
Lane Grp Cap(c), veh/h	271	532	559	200	928	415	688	0	921	854	0	879
V/C Ratio(X)	0.31	0.72	0.72	0.05	0.55	0.30	0.02	0.00	0.01	0.17	0.00	0.19
Avail Cap(c_a), veh/h	381	806	847	300	1455	651	688	0	921	854	0	879
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	15.3	15.3	24.6	32.2	29.9	11.3	0.0	9.0	10.0	0.0	10.0
Incr Delay (d2), s/veh	0.5	1.4	1.3	0.1	0.5	0.4	0.0	0.0	0.0	0.4	0.0	0.5
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	1.5	6.8	7.1	0.2	5.9	2.8	0.1	0.0	0.2	1.8	0.0	2.1
LnGrp Delay(d),s/veh	21.7	16.7	16.6	24.7	32.7	30.3	11.3	0.0	9.0	10.5	0.0	10.4
LnGrp LOS	C	B	B	C	C	C	B		A	B		B
Approach Vol, veh/h		872			646			24			308	
Approach Delay, s/veh		17.1			32.1			10.1			10.4	
Approach LOS		B			C			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		54.0	5.0	31.1		54.0	8.4	27.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	6.0	41.0		31.0	10.0	37.0
Max Q Clear Time (g_c+I1), s		7.2	2.4	15.8		6.8	5.0	13.8
Green Ext Time (p_c), s		1.5	0.0	10.2		1.5	0.1	9.8

Intersection Summary	
HCM 2010 Ctrl Delay	21.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	6	805	52	75	574	0	40	0	34	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	97	97	92	84	92	84	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	821	53	77	592	0	48	0	40	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	592	0	0	874	0	0	1311	1606	437
Stage 1	-	-	-	-	-	-	860	860	-
Stage 2	-	-	-	-	-	-	451	746	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	980	-	-	768	-	-	150	104	567
Stage 1	-	-	-	-	-	-	375	371	-
Stage 2	-	-	-	-	-	-	609	419	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	980	-	-	768	-	-	134	0	567
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	0	-
Stage 1	-	-	-	-	-	-	373	0	-
Stage 2	-	-	-	-	-	-	548	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	1.2	30.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	134	567	980	-	-	768	-	-
HCM Lane V/C Ratio	0.355	0.071	0.006	-	-	0.101	-	-
HCM Control Delay (s)	46	11.8	8.7	-	-	10.2	-	-
HCM Lane LOS	E	B	A	-	-	B	-	-
HCM 95th %tile Q(veh)	1.5	0.2	0	-	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	612	25	24	583	313	12	12	32	416	11	69
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	181	651	27	26	620	333	19	19	50	438	12	73
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.64	0.64	0.64	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	1157	48	295	925	414	30	581	494	534	838	713
Arrive On Green	0.19	0.67	0.67	0.02	0.26	0.26	0.02	0.31	0.31	0.16	0.45	0.45
Sat Flow, veh/h	1774	3463	144	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	181	332	346	26	620	333	19	19	50	438	12	73
Grp Sat Flow(s),veh/h/ln	1774	1770	1837	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	6.4	9.0	9.0	1.0	14.1	17.7	1.0	0.6	2.0	11.1	0.3	2.4
Cycle Q Clear(g_c), s	6.4	9.0	9.0	1.0	14.1	17.7	1.0	0.6	2.0	11.1	0.3	2.4
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	591	614	295	925	414	30	581	494	534	838	713
V/C Ratio(X)	0.59	0.56	0.56	0.09	0.67	0.80	0.64	0.03	0.10	0.82	0.01	0.10
Avail Cap(c_a), veh/h	358	629	653	336	983	440	79	581	494	727	838	713
HCM Platoon Ratio	2.00	2.00	2.00	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	19.2	11.4	11.4	23.5	29.8	31.1	44.0	21.5	22.0	36.8	13.7	14.3
Incr Delay (d2), s/veh	1.9	1.0	1.0	0.1	1.6	10.0	20.4	0.1	0.4	5.5	0.0	0.3
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	3.2	4.4	4.6	0.5	7.1	8.9	0.6	0.3	0.9	5.7	0.2	1.1
LnGrp Delay(d),s/veh	21.1	12.4	12.4	23.7	31.4	41.1	64.3	21.6	22.4	42.3	13.7	14.6
LnGrp LOS	C	B	B	C	C	D	E	C	C	D	B	B
Approach Vol, veh/h		859			979			88			523	
Approach Delay, s/veh		14.3			34.5			31.3			37.7	
Approach LOS		B			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	18.0	32.1	5.9	34.1	5.5	44.5	12.5	27.5
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	19.0	19.0	4.0	32.0	4.0	34.0	11.0	25.0
Max Q Clear Time (g_c+I1), s	13.1	4.0	3.0	11.0	3.0	4.4	8.4	19.7
Green Ext Time (p_c), s	0.9	0.4	0.0	10.3	0.0	0.5	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	657	191	645	566	7	215	15	889	10	13	3
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	699	203	701	615	8	234	16	966	11	14	3
Adj No. of Lanes	1	2	1	2	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	708	317	727	1423	637	706	849	721	337	678	145
Arrive On Green	0.01	0.20	0.20	0.21	0.40	0.40	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1390	1863	1583	571	1488	319
Grp Volume(v), veh/h	9	699	203	701	615	8	234	16	966	11	0	17
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1390	1863	1583	571	0	1806
Q Serve(g_s), s	0.5	17.7	10.6	18.2	11.3	0.3	10.0	0.4	41.0	1.0	0.0	0.5
Cycle Q Clear(g_c), s	0.5	17.7	10.6	18.2	11.3	0.3	10.5	0.4	41.0	1.4	0.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	16	708	317	727	1423	637	706	849	721	337	0	823
V/C Ratio(X)	0.57	0.99	0.64	0.96	0.43	0.01	0.33	0.02	1.34	0.03	0.00	0.02
Avail Cap(c_a), veh/h	79	708	317	727	1423	637	706	849	721	337	0	823
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	0.00	1.00
Uniform Delay (d), s/veh	44.4	35.9	33.0	35.2	19.5	16.2	16.3	13.5	24.5	13.8	0.0	13.5
Incr Delay (d2), s/veh	28.0	30.6	4.3	24.9	0.2	0.0	1.3	0.0	162.0	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	0.3	11.6	5.0	11.1	5.6	0.1	4.1	0.2	50.3	0.2	0.0	0.2
LnGrp Delay(d),s/veh	72.4	66.5	37.4	60.1	19.7	16.2	17.6	13.5	186.5	14.0	0.0	13.5
LnGrp LOS	E	E	D	E	B	B	B	B	F	B		B
Approach Vol, veh/h		911			1324			1216			28	
Approach Delay, s/veh		60.0			41.1			151.7			13.7	
Approach LOS		E			D			F			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.0	23.0	22.0		45.0	4.8	40.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		41.0	19.0	18.0		41.0	4.0	33.0
Max Q Clear Time (g_c+I1), s		43.0	20.2	19.7		3.4	2.5	13.3
Green Ext Time (p_c), s		0.0	0.0	0.0		6.7	0.0	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	84.5
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	59	27	435	91	323	45	1730	265	657	1507	59
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	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	89	68	31	468	285	222	45	1747	268	670	1538	60
Adj No. of Lanes	1	1	1	2	1	1	1	3	0	2	3	0
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.99	0.99	0.99	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	90	76	627	307	590	133	2130	325	716	3069	120
Arrive On Green	0.06	0.05	0.05	0.29	0.27	0.27	0.08	0.48	0.48	0.21	0.61	0.61
Sat Flow, veh/h	1774	1863	1583	3548	1863	1583	1774	4455	679	3442	5022	196
Grp Volume(v), veh/h	89	68	31	468	285	222	45	1327	688	670	1038	560
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1695	1743	1721	1695	1828
Q Serve(g_s), s	8.9	6.5	3.4	21.5	26.8	14.3	4.3	60.4	61.3	34.5	30.9	30.9
Cycle Q Clear(g_c), s	8.9	6.5	3.4	21.5	26.8	14.3	4.3	60.4	61.3	34.5	30.9	30.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.11
Lane Grp Cap(c), veh/h	107	90	76	627	307	590	133	1621	834	716	2072	1117
V/C Ratio(X)	0.83	0.76	0.41	0.75	0.93	0.38	0.34	0.82	0.83	0.94	0.50	0.50
Avail Cap(c_a), veh/h	118	166	141	627	331	611	133	1621	834	765	2072	1117
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.7	84.6	83.2	59.8	64.3	23.3	79.0	40.2	40.5	70.1	19.6	19.6
Incr Delay (d2), s/veh	35.0	12.2	3.4	3.8	25.9	0.3	1.5	4.7	9.2	18.1	0.9	1.6
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	5.4	3.6	1.6	10.8	15.9	6.3	2.2	29.3	31.6	18.2	14.7	16.1
LnGrp Delay(d),s/veh	118.7	96.8	86.6	63.7	90.2	23.6	80.5	45.0	49.7	88.2	20.5	21.2
LnGrp LOS	F	F	F	E	F	C	F	D	D	F	C	C
Approach Vol, veh/h		188			975			2060			2268	
Approach Delay, s/veh		105.5			62.3			47.3			40.7	
Approach LOS		F			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	41.4	90.1	35.8	12.7	17.5	114.0	14.8	33.6
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	40.0	80.0	28.0	16.0	10.0	110.0	12.0	32.0
Max Q Clear Time (g_c+I1), s	36.5	63.3	23.5	8.5	6.3	32.9	10.9	28.8
Green Ext Time (p_c), s	1.0	12.7	0.9	0.2	2.1	19.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	49.2
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	423	328	267	94	339	89	193	153	115	58	98	308
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	450	349	284	100	361	95	199	158	119	72	121	380
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	1113	498	308	586	148	372	910	773	564	864	773
Arrive On Green	0.23	0.31	0.31	0.06	0.14	0.14	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	3539	1583	1774	4048	1024	894	1863	1583	1098	1770	1583
Grp Volume(v), veh/h	450	349	284	100	300	156	199	158	119	72	121	380
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1682	894	1863	1583	1098	1770	1583
Q Serve(g_s), s	18.3	6.7	13.5	4.3	7.5	7.9	17.4	4.3	3.7	3.5	3.4	14.5
Cycle Q Clear(g_c), s	18.3	6.7	13.5	4.3	7.5	7.9	31.9	4.3	3.7	7.8	3.4	14.5
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	1113	498	308	491	243	372	910	773	564	864	773
V/C Ratio(X)	0.82	0.31	0.57	0.33	0.61	0.64	0.53	0.17	0.15	0.13	0.14	0.49
Avail Cap(c_a), veh/h	626	1376	616	313	603	299	372	910	773	564	864	773
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)	0.36	0.36	0.36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	23.5	25.8	29.9	36.1	36.3	26.2	12.9	12.7	15.1	12.6	15.5
Incr Delay (d2), s/veh	2.9	0.1	0.4	0.6	1.2	3.2	5.4	0.4	0.4	0.5	0.3	2.2
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	9.2	3.3	5.9	2.1	3.6	3.9	4.8	2.3	1.7	1.1	1.7	6.8
LnGrp Delay(d),s/veh	25.5	23.5	26.1	30.5	37.4	39.5	31.7	13.3	13.2	15.5	13.0	17.7
LnGrp LOS	C	C	C	C	D	D	C	B	B	B	B	B
Approach Vol, veh/h		1083			556			476			573	
Approach Delay, s/veh		25.0			36.7			20.9			16.4	
Approach LOS		C			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		48.0	9.7	32.3		48.0	25.0	17.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	6.0	35.0		37.0	25.0	16.0
Max Q Clear Time (g_c+I1), s		33.9	6.3	15.5		16.5	20.3	9.9
Green Ext Time (p_c), s		1.8	0.0	6.3		6.3	0.7	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	185	253	65	57	245	197	107	83	67	178	89	164
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	195	266	68	60	258	207	122	94	76	200	100	184
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	715	180	331	652	292	679	1067	907	746	1067	907
Arrive On Green	0.11	0.26	0.26	0.04	0.18	0.18	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1774	2804	704	1774	3539	1583	1091	1863	1583	1210	1863	1583
Grp Volume(v), veh/h	195	166	168	60	258	207	122	94	76	200	100	184
Grp Sat Flow(s),veh/h/ln	1774	1770	1739	1774	1770	1583	1091	1863	1583	1210	1863	1583
Q Serve(g_s), s	7.6	6.9	7.2	2.4	5.8	11.0	5.1	2.0	1.9	8.0	2.2	5.1
Cycle Q Clear(g_c), s	7.6	6.9	7.2	2.4	5.8	11.0	7.3	2.0	1.9	10.1	2.2	5.1
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	385	452	444	331	652	292	679	1067	907	746	1067	907
V/C Ratio(X)	0.51	0.37	0.38	0.18	0.40	0.71	0.18	0.09	0.08	0.27	0.09	0.20
Avail Cap(c_a), veh/h	546	728	715	381	983	440	679	1067	907	746	1067	907
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	24.1	27.6	27.6	28.1	32.3	34.5	10.3	8.6	8.6	10.9	8.7	9.3
Incr Delay (d2), s/veh	1.0	0.5	0.5	0.3	0.4	3.2	0.6	0.2	0.2	0.9	0.2	0.5
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	3.8	3.4	3.5	1.2	2.9	5.1	1.6	1.1	0.9	2.8	1.2	2.3
LnGrp Delay(d),s/veh	25.1	28.1	28.2	28.4	32.7	37.6	10.9	8.8	8.8	11.8	8.8	9.8
LnGrp LOS	C	C	C	C	C	D	B	A	A	B	A	A
Approach Vol, veh/h		529			525			292			484	
Approach Delay, s/veh		27.0			34.2			9.7			10.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.6	7.5	27.0		55.6	13.9	20.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		35.0	6.0	37.0		35.0	18.0	25.0
Max Q Clear Time (g_c+I1), s		9.3	4.4	9.2		12.1	9.6	13.0
Green Ext Time (p_c), s		3.4	0.0	4.7		3.3	0.3	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	389	186	103	162	198	513	88	1962	77	580	1970	219
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	409	196	108	171	208	540	91	2023	79	604	2052	228
Adj No. of Lanes	2	1	0	1	1	2	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	449	208	115	211	264	971	109	2204	686	712	2691	296
Arrive On Green	0.13	0.18	0.18	0.09	0.14	0.14	0.06	0.43	0.43	0.21	0.58	0.58
Sat Flow, veh/h	3476	1141	629	1774	1863	2787	1774	5085	1583	3442	4652	511
Grp Volume(v), veh/h	409	0	304	171	208	540	91	2023	79	604	1489	791
Grp Sat Flow(s),veh/h/ln	1738	0	1770	1774	1863	1393	1774	1695	1583	1721	1695	1773
Q Serve(g_s), s	20.9	0.0	30.5	14.8	19.4	6.6	9.1	67.4	4.1	30.4	59.4	61.1
Cycle Q Clear(g_c), s	20.9	0.0	30.5	14.8	19.4	6.6	9.1	67.4	4.1	30.4	59.4	61.1
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	449	0	322	211	264	971	109	2204	686	712	1961	1025
V/C Ratio(X)	0.91	0.00	0.94	0.81	0.79	0.56	0.83	0.92	0.12	0.85	0.76	0.77
Avail Cap(c_a), veh/h	483	0	334	211	264	971	168	2204	686	712	1961	1025
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	0.00	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	77.4	0.0	72.7	60.7	74.6	25.7	83.5	48.0	17.8	68.7	28.5	28.9
Incr Delay (d2), s/veh	20.6	0.0	34.1	20.6	14.6	0.7	18.6	7.6	0.3	9.5	2.8	5.6
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	11.3	0.0	18.0	8.4	11.1	7.7	5.1	33.0	1.9	15.4	28.5	31.5
LnGrp Delay(d),s/veh	97.9	0.0	106.8	81.3	89.2	26.4	102.1	55.6	18.1	78.2	31.3	34.5
LnGrp LOS	F		F	F	F	C	F	E	B	E	C	C
Approach Vol, veh/h		713			919			2193			2884	
Approach Delay, s/veh		101.7			50.8			56.2			42.0	
Approach LOS		F			D			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	41.2	82.0	20.0	36.8	15.1	108.1	27.3	29.5
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	36.0	78.0	16.0	34.0	17.0	97.0	25.0	25.0
Max Q Clear Time (g_c+I1), s	32.4	69.4	16.8	32.5	11.1	63.1	22.9	21.4
Green Ext Time (p_c), s	0.7	7.4	0.0	0.2	0.1	27.1	0.3	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	54.2
HCM 2010 LOS	D

Appendix E
No-Build Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	45	17	106	509	24	26	115	1773	190	20	1284	32
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	19	116	559	26	29	126	1948	209	22	1411	35
Adj No. of Lanes	2	1	2	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	97	275	623	337	287	165	3042	1149	237	3222	80
Arrive On Green	0.05	0.05	0.05	0.18	0.18	0.18	0.05	0.54	0.54	0.13	0.63	0.63
Sat Flow, veh/h	3442	1863	2787	3442	1863	1583	3548	5588	1583	1774	5104	127
Grp Volume(v), veh/h	49	19	116	559	26	29	126	1948	209	22	937	509
Grp Sat Flow(s),veh/h/ln	1721	1863	1393	1721	1863	1583	1774	1863	1583	1774	1695	1840
Q Serve(g_s), s	2.5	1.8	7.0	28.6	2.1	2.8	6.3	43.9	7.5	2.0	25.4	25.4
Cycle Q Clear(g_c), s	2.5	1.8	7.0	28.6	2.1	2.8	6.3	43.9	7.5	2.0	25.4	25.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	180	97	275	623	337	287	165	3042	1149	237	2140	1162
V/C Ratio(X)	0.27	0.20	0.42	0.90	0.08	0.10	0.76	0.64	0.18	0.09	0.44	0.44
Avail Cap(c_a), veh/h	306	166	378	841	455	387	217	3042	1149	237	2140	1162
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	0.71	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.0	81.7	76.3	72.1	61.2	61.5	84.8	28.7	7.8	68.4	16.9	16.9
Incr Delay (d2), s/veh	0.8	1.0	1.0	7.3	0.1	0.1	10.9	1.0	0.3	0.2	0.7	1.2
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	1.2	0.9	2.8	14.2	1.1	1.2	3.3	22.8	5.6	1.0	12.0	13.2
LnGrp Delay(d),s/veh	82.8	82.7	77.3	79.3	61.3	61.6	95.7	29.7	8.2	68.6	17.6	18.1
LnGrp LOS	F	F	E	E	E	E	F	C	A	E	B	B
Approach Vol, veh/h		184			614			2283			1468	
Approach Delay, s/veh		79.3			77.7			31.4			18.5	
Approach LOS		E			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.0	102.0		13.4	12.4	117.6		36.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	98.0		16.0	11.0	93.0		44.0
Max Q Clear Time (g_c+I1), s	4.0	45.9		9.0	8.3	27.4		30.6
Green Ext Time (p_c), s	1.3	28.3		0.3	0.1	15.6		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	212	0	2	486	29	3	2	0	14	0	10
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	54	226	0	2	534	32	5	3	0	32	0	23
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.63	0.63	0.63	0.44	0.44	0.44
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	927	414	345	781	47	913	1123	0	928	1123	954
Arrive On Green	0.07	0.52	0.00	0.00	0.15	0.15	0.60	0.60	0.00	0.60	0.00	0.60
Sat Flow, veh/h	1774	3539	1583	1774	3394	203	1383	1863	0	1408	1863	1583
Grp Volume(v), veh/h	54	226	0	2	278	288	5	3	0	32	0	23
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1827	1383	1863	0	1408	1863	1583
Q Serve(g_s), s	2.0	3.1	0.0	0.1	13.4	13.4	0.1	0.1	0.0	0.8	0.0	0.5
Cycle Q Clear(g_c), s	2.0	3.1	0.0	0.1	13.4	13.4	0.1	0.1	0.0	0.9	0.0	0.5
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	927	414	345	407	421	913	1123	0	928	1123	954
V/C Ratio(X)	0.26	0.24	0.00	0.01	0.68	0.68	0.01	0.00	0.00	0.03	0.00	0.02
Avail Cap(c_a), veh/h	385	1770	792	499	806	832	913	1123	0	928	1123	954
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.67	0.67	0.67	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	16.6	0.0	26.6	34.9	35.0	7.1	7.1	0.0	7.3	0.0	7.2
Incr Delay (d2), s/veh	0.6	0.1	0.0	0.0	1.4	1.3	0.0	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	1.0	1.5	0.0	0.0	6.7	6.9	0.1	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	25.5	16.7	0.0	26.6	36.3	36.3	7.1	7.1	0.0	7.4	0.0	7.3
LnGrp LOS	C	B		C	D	D	A	A		A		A
Approach Vol, veh/h		280			568			8			55	
Approach Delay, s/veh		18.4			36.3			7.1			7.3	
Approach LOS		B			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.2	4.2	27.6		58.2	7.0	24.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	8.0	45.0		25.0	12.0	41.0
Max Q Clear Time (g_c+I1), s		2.1	2.1	5.1		2.9	4.0	15.4
Green Ext Time (p_c), s		0.1	0.0	5.7		0.1	0.0	5.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	33	179	0	8	550	8	0	1	0	1	0	7
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	38	206	0	10	663	10	0	4	0	1	0	8
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.25	0.25	0.25	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	925	414	340	870	13	0	1109	0	916	0	943
Arrive On Green	0.01	0.09	0.00	0.02	0.49	0.49	0.00	0.60	0.00	0.60	0.00	0.60
Sat Flow, veh/h	1774	3539	1583	1774	3569	54	0	1863	0	1405	0	1583
Grp Volume(v), veh/h	38	206	0	10	329	344	0	4	0	1	0	8
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1853	0	1863	0	1405	0	1583
Q Serve(g_s), s	1.4	4.9	0.0	0.4	13.6	13.6	0.0	0.1	0.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	1.4	4.9	0.0	0.4	13.6	13.6	0.0	0.1	0.0	0.1	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.03	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	925	414	340	432	452	0	1109	0	917	0	943
V/C Ratio(X)	0.19	0.22	0.00	0.03	0.76	0.76	0.00	0.00	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h	328	1927	862	480	944	988	0	1109	0	917	0	943
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.69	0.69	0.69	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.0	32.6	0.0	25.0	20.9	20.9	0.0	7.4	0.0	7.4	0.0	7.4
Incr Delay (d2), s/veh	0.5	0.1	0.0	0.0	1.9	1.9	0.0	0.0	0.0	0.0	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	0.7	2.4	0.0	0.2	6.8	7.1	0.0	0.0	0.0	0.0	0.0	0.1
LnGrp Delay(d),s/veh	26.5	32.7	0.0	25.0	22.9	22.8	0.0	7.4	0.0	7.4	0.0	7.4
LnGrp LOS	C	C		C	C	C		A		A		A
Approach Vol, veh/h		244			683			4			9	
Approach Delay, s/veh		31.7			22.9			7.4			7.4	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.6	4.9	27.5		57.6	6.5	25.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	8.0	49.0		21.0	9.0	48.0
Max Q Clear Time (g_c+I1), s		2.1	2.4	6.9		2.2	3.4	15.6
Green Ext Time (p_c), s		0.0	0.0	6.5		0.0	0.0	6.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	136	0	0	556	23	0	0	0	6	0	7
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	32	174	0	0	662	27	0	0	0	11	0	13
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.25	0.25	0.25	0.55	0.55	0.55
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	1183	0	402	939	420	80	1075	0	894	0	913
Arrive On Green	0.02	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.58	0.00	0.58
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1395	1863	0	1412	0	1583
Grp Volume(v), veh/h	32	174	0	0	662	27	0	0	0	11	0	13
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1583	1395	1863	0	1412	0	1583
Q Serve(g_s), s	1.1	3.6	0.0	0.0	15.2	1.1	0.0	0.0	0.0	0.3	0.0	0.3
Cycle Q Clear(g_c), s	1.1	3.6	0.0	0.0	15.2	1.1	0.0	0.0	0.0	0.3	0.0	0.3
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	1183	0	402	939	420	80	1075	0	894	0	913
V/C Ratio(X)	0.16	0.15	0.00	0.00	0.71	0.06	0.00	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	349	2163	0	479	1927	862	80	1075	0	894	0	913
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	0.00	0.69	0.69	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	24.6	0.0	0.0	29.9	24.7	0.0	0.0	0.0	8.1	0.0	8.1
Incr Delay (d2), s/veh	0.4	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	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	0.6	1.7	0.0	0.0	7.5	0.5	0.0	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	24.0	24.7	0.0	0.0	30.6	24.8	0.0	0.0	0.0	8.1	0.0	8.2
LnGrp LOS	C	C			C	C				A		A
Approach Vol, veh/h		206			689			0			24	
Approach Delay, s/veh		24.6			30.3			0.0			8.1	
Approach LOS		C			C						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.9	0.0	34.1		55.9	6.2	27.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		19.0	4.0	55.0		19.0	10.0	49.0
Max Q Clear Time (g_c+I1), s		0.0	0.0	5.6		2.3	3.1	17.2
Green Ext Time (p_c), s		0.0	0.0	7.1		0.0	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	141	0	5	574	12	5	0	0	5	0	5
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	15	174	0	6	709	15	10	0	0	7	0	7
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.50	0.50	0.50	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	1045	0	393	1017	455	870	1053	0	878	0	895
Arrive On Green	0.00	0.10	0.00	0.00	0.19	0.19	0.57	0.00	0.00	0.57	0.00	0.57
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1403	1863	0	1412	0	1583
Grp Volume(v), veh/h	15	174	0	6	709	15	10	0	0	7	0	7
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1583	1403	1863	0	1412	0	1583
Q Serve(g_s), s	0.5	4.1	0.0	0.2	16.8	0.7	0.3	0.0	0.0	0.2	0.0	0.2
Cycle Q Clear(g_c), s	0.5	4.1	0.0	0.2	16.8	0.7	0.5	0.0	0.0	0.2	0.0	0.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	1045	0	393	1017	455	870	1053	0	878	0	895
V/C Ratio(X)	0.08	0.17	0.00	0.02	0.70	0.03	0.01	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	311	1966	0	539	1966	880	870	1053	0	878	0	895
HCM Platoon Ratio	0.33	0.33	0.33	0.67	0.67	0.67	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	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.0	30.5	0.0	22.6	32.7	26.2	8.7	0.0	0.0	8.5	0.0	8.5
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	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	0.3	2.0	0.0	0.1	8.3	0.3	0.1	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	24.2	30.5	0.0	22.7	33.5	26.2	8.7	0.0	0.0	8.6	0.0	8.6
LnGrp LOS	C	C		C	C	C	A			A		A
Approach Vol, veh/h		189			730			10			14	
Approach Delay, s/veh		30.0			33.3			8.7			8.6	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		54.9	4.6	30.6		54.9	5.3	29.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	8.0	50.0		20.0	8.0	50.0
Max Q Clear Time (g_c+I1), s		2.5	2.2	6.1		2.2	2.5	18.8
Green Ext Time (p_c), s		0.0	0.0	7.5		0.0	0.0	7.1

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	134	11	51	538	0	69	0	83	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	83	83	86	86	92	77	92	77	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	161	13	59	626	0	90	0	108	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	626	0	0	175	0	0	599	912	87
Stage 1	-	-	-	-	-	-	168	168	-
Stage 2	-	-	-	-	-	-	431	744	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	952	-	-	1399	-	-	433	272	954
Stage 1	-	-	-	-	-	-	844	758	-
Stage 2	-	-	-	-	-	-	623	420	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	952	-	-	1399	-	-	415	0	954
Mov Cap-2 Maneuver	-	-	-	-	-	-	415	0	-
Stage 1	-	-	-	-	-	-	844	0	-
Stage 2	-	-	-	-	-	-	597	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	415	954	952	-	-	1399	-	-
HCM Lane V/C Ratio	0.216	0.113	-	-	-	0.042	-	-
HCM Control Delay (s)	16	9.3	0	-	-	7.7	-	-
HCM Lane LOS	C	A	A	-	-	A	-	-
HCM 95th %tile Q(veh)	0.8	0.4	0	-	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	160	35	30	514	82	52	19	62	10	10	10
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	26	205	45	34	584	93	58	21	70	18	18	18
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.89	0.89	0.89	0.56	0.56	0.56
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	675	145	336	839	375	75	1021	868	55	972	826
Arrive On Green	0.04	0.47	0.47	0.03	0.24	0.24	0.04	0.55	0.55	0.02	0.52	0.52
Sat Flow, veh/h	1774	2899	624	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	26	124	126	34	584	93	58	21	70	18	18	18
Grp Sat Flow(s),veh/h/ln	1774	1770	1753	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	1.0	3.9	4.1	1.3	13.6	4.3	2.9	0.5	1.9	0.5	0.4	0.5
Cycle Q Clear(g_c), s	1.0	3.9	4.1	1.3	13.6	4.3	2.9	0.5	1.9	0.5	0.4	0.5
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	412	408	336	839	375	75	1021	868	55	972	826
V/C Ratio(X)	0.14	0.30	0.31	0.10	0.70	0.25	0.77	0.02	0.08	0.32	0.02	0.02
Avail Cap(c_a), veh/h	264	688	682	409	1376	616	237	1021	868	229	972	826
HCM Platoon Ratio	2.00	2.00	2.00	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	25.8	19.5	19.5	25.3	31.4	27.8	42.7	9.3	9.6	43.8	10.4	10.4
Incr Delay (d2), s/veh	0.4	0.4	0.4	0.1	1.1	0.3	15.5	0.0	0.2	3.3	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	0.5	1.9	1.9	0.6	6.8	1.9	1.8	0.2	0.9	0.2	0.2	0.2
LnGrp Delay(d),s/veh	26.2	19.9	20.0	25.5	32.4	28.2	58.2	9.3	9.8	47.1	10.4	10.5
LnGrp LOS	C	B	B	C	C	C	E	A	A	D	B	B
Approach Vol, veh/h		276			711			149			54	
Approach Delay, s/veh		20.5			31.5			28.6			22.7	
Approach LOS		C			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	5.4	53.3	6.3	24.9	7.8	51.0	5.9	25.3
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	27.0	6.0	35.0	12.0	21.0	6.0	35.0
Max Q Clear Time (g_c+I1), s	2.5	3.9	3.3	6.1	4.9	2.5	3.0	15.6
Green Ext Time (p_c), s	0.0	0.4	0.0	6.5	0.0	0.4	0.0	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	263	70	542	978	6	79	8	129	12	19	26
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	296	79	565	1019	6	100	10	163	14	22	31
Adj No. of Lanes	1	2	1	2	2	1	1	1	1	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.96	0.96	0.96	0.79	0.79	0.79	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	715	320	688	1382	618	682	866	1052	637	326	459
Arrive On Green	0.01	0.20	0.20	0.20	0.39	0.39	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1346	1863	1583	1207	701	988
Grp Volume(v), veh/h	12	296	79	565	1019	6	100	10	163	14	0	53
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1346	1863	1583	1207	0	1688
Q Serve(g_s), s	0.6	6.6	3.8	14.1	22.2	0.2	4.0	0.3	3.5	0.6	0.0	1.6
Cycle Q Clear(g_c), s	0.6	6.6	3.8	14.1	22.2	0.2	5.6	0.3	3.5	0.8	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.58
Lane Grp Cap(c), veh/h	20	715	320	688	1382	618	682	866	1052	637	0	785
V/C Ratio(X)	0.59	0.41	0.25	0.82	0.74	0.01	0.15	0.01	0.15	0.02	0.00	0.07
Avail Cap(c_a), veh/h	118	983	440	1147	1927	862	682	866	1052	637	0	785
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	0.00	1.00
Uniform Delay (d), s/veh	44.3	31.3	30.1	34.5	23.5	16.8	14.8	13.0	5.6	13.2	0.0	13.3
Incr Delay (d2), s/veh	24.0	0.4	0.4	2.5	0.9	0.0	0.5	0.0	0.3	0.1	0.0	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	0.4	3.2	1.7	7.0	10.9	0.1	1.6	0.1	1.6	0.2	0.0	0.8
LnGrp Delay(d),s/veh	68.2	31.6	30.5	37.0	24.4	16.8	15.3	13.0	6.0	13.3	0.0	13.5
LnGrp LOS	E	C	C	D	C	B	B	B	A	B		B
Approach Vol, veh/h		387			1590			273			67	
Approach Delay, s/veh		32.6			28.9			9.6			13.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.8	22.0	22.2		45.8	5.0	39.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	30.0	25.0		23.0	6.0	49.0
Max Q Clear Time (g_c+I1), s		7.6	16.1	8.6		3.6	2.6	24.2
Green Ext Time (p_c), s		1.1	1.8	8.8		1.2	0.0	11.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	2	2	38	3	39	9	1686	52	96	1302	18
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	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	8	3	3	51	0	55	10	1833	57	98	1329	18
Adj No. of Lanes	1	1	1	2	0	2	1	3	0	2	3	0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.92	0.92	0.92	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	40	34	84	0	86	265	4187	130	137	3706	50
Arrive On Green	0.02	0.02	0.02	0.02	0.00	0.03	0.15	0.83	0.83	0.04	0.72	0.72
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	5068	157	3442	5171	70
Grp Volume(v), veh/h	8	3	3	51	0	55	10	1226	664	98	871	476
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1835	1721	1695	1850
Q Serve(g_s), s	0.8	0.3	0.3	2.6	0.0	2.8	0.9	17.7	17.7	5.1	17.6	17.6
Cycle Q Clear(g_c), s	0.8	0.3	0.3	2.6	0.0	2.8	0.9	17.7	17.7	5.1	17.6	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.04
Lane Grp Cap(c), veh/h	32	40	34	84	0	86	265	2801	1516	137	2430	1326
V/C Ratio(X)	0.25	0.07	0.09	0.61	0.00	0.64	0.04	0.44	0.44	0.72	0.36	0.36
Avail Cap(c_a), veh/h	59	166	141	197	0	352	265	2801	1516	287	2430	1326
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	0.99	0.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	87.2	86.3	86.3	87.1	0.0	72.3	65.5	4.3	4.3	85.4	9.7	9.7
Incr Delay (d2), s/veh	4.1	0.8	1.1	6.9	0.0	7.4	0.1	0.5	0.9	6.8	0.4	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	0.4	0.2	0.2	1.3	0.0	1.3	0.4	8.4	9.2	2.5	8.4	9.3
LnGrp Delay(d),s/veh	91.3	87.1	87.4	93.9	0.0	79.7	65.6	4.8	5.2	92.2	10.1	10.5
LnGrp LOS	F	F	F	F		E	E	A	A	F	B	B
Approach Vol, veh/h		14			106			1900			1445	
Approach Delay, s/veh		89.6			86.6			5.2			15.8	
Approach LOS		F			F			A			B	

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	11.2	152.7	8.2	7.9	30.9	133.0	7.2	8.9
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	15.0	123.0	10.0	16.0	9.0	129.0	6.0	20.0
Max Q Clear Time (g_c+I1), s	7.1	19.7	4.6	2.3	2.9	19.6	2.8	4.8
Green Ext Time (p_c), s	0.1	28.2	0.0	0.0	3.1	13.9	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	64	90	27	25	68	9	15	2	8	5	8	36
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	90	127	38	31	85	11	36	5	19	6	10	43
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.71	0.71	0.71	0.80	0.80	0.80	0.42	0.42	0.42	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	335	150	190	255	32	1077	1393	1184	1112	1324	1184
Arrive On Green	0.06	0.09	0.09	0.02	0.06	0.06	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1774	3539	1583	1774	4580	572	1346	1863	1583	1381	1770	1583
Grp Volume(v), veh/h	90	127	38	31	62	34	36	5	19	6	10	43
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1762	1346	1863	1583	1381	1770	1583
Q Serve(g_s), s	4.2	3.0	2.0	1.5	1.6	1.7	0.6	0.1	0.3	0.1	0.1	0.6
Cycle Q Clear(g_c), s	4.2	3.0	2.0	1.5	1.6	1.7	1.3	0.1	0.3	0.2	0.1	0.6
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	335	150	190	188	98	1077	1393	1184	1112	1324	1184
V/C Ratio(X)	0.38	0.38	0.25	0.16	0.33	0.35	0.03	0.00	0.02	0.01	0.01	0.04
Avail Cap(c_a), veh/h	621	1258	563	443	829	431	1077	1393	1184	1112	1324	1184
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)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	38.3	37.8	38.8	40.9	40.9	3.1	2.9	2.9	2.9	2.9	2.9
Incr Delay (d2), s/veh	0.8	0.6	0.8	0.4	1.0	2.1	0.1	0.0	0.0	0.0	0.0	0.1
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	2.1	1.5	0.9	0.7	0.8	0.9	0.3	0.0	0.1	0.0	0.1	0.3
LnGrp Delay(d),s/veh	36.3	38.9	38.6	39.2	41.9	43.0	3.2	2.9	2.9	2.9	2.9	3.0
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		255			127			60			59	
Approach Delay, s/veh		37.9			41.5			3.1			3.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		71.3	6.2	12.5		71.3	9.7	9.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	15.0	32.0		31.0	25.0	22.0
Max Q Clear Time (g_c+I1), s		3.3	3.5	5.0		2.6	6.2	3.7
Green Ext Time (p_c), s		0.5	0.0	1.5		0.5	0.2	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	21	45	16	18	79	37	5	1	2	9	1	14
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	64	23	22	99	46	9	2	3	10	1	16
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.70	0.70	0.70	0.80	0.80	0.80	0.58	0.58	0.58	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	178	61	171	227	102	1163	1451	1233	1174	1451	1233
Arrive On Green	0.02	0.07	0.07	0.02	0.06	0.06	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1774	2590	886	1774	3539	1583	1390	1863	1583	1405	1863	1583
Grp Volume(v), veh/h	30	43	44	22	99	46	9	2	3	10	1	16
Grp Sat Flow(s),veh/h/ln	1774	1770	1706	1774	1770	1583	1390	1863	1583	1405	1863	1583
Q Serve(g_s), s	1.4	2.1	2.2	1.0	2.4	2.5	0.1	0.0	0.0	0.1	0.0	0.2
Cycle Q Clear(g_c), s	1.4	2.1	2.2	1.0	2.4	2.5	0.1	0.0	0.0	0.2	0.0	0.2
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	122	117	171	227	102	1163	1451	1233	1174	1451	1233
V/C Ratio(X)	0.18	0.35	0.38	0.13	0.44	0.45	0.01	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	520	669	645	512	1298	581	1163	1451	1233	1174	1451	1233
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	38.1	40.0	40.1	38.3	40.5	40.6	2.2	2.2	2.2	2.2	2.2	2.2
Incr Delay (d2), s/veh	0.5	1.7	2.0	0.3	1.3	3.1	0.0	0.0	0.0	0.0	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	0.7	1.1	1.1	0.5	1.2	1.2	0.1	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	38.6	41.7	42.0	38.7	41.9	43.7	2.2	2.2	2.2	2.2	2.2	2.2
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		117			167			14			27	
Approach Delay, s/veh		41.0			41.9			2.2			2.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.1	5.7	10.2		74.1	6.1	9.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	19.0	34.0		25.0	20.0	33.0
Max Q Clear Time (g_c+I1), s		2.1	3.0	4.2		2.2	3.4	4.5
Green Ext Time (p_c), s		0.1	0.0	1.3		0.1	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	152	25	20	105	77	1050	43	1661	24	289	1310	83
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	167	27	22	124	91	1235	48	1846	27	301	1365	86
Adj No. of Lanes	2	1	0	1	1	2	1	3	1	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	39	32	676	631	1219	103	2111	657	339	2228	140
Arrive On Green	0.06	0.04	0.04	0.36	0.34	0.34	0.06	0.42	0.42	0.10	0.46	0.46
Sat Flow, veh/h	3476	960	783	1774	1863	2787	1774	5085	1583	3442	4890	308
Grp Volume(v), veh/h	167	0	49	124	91	1235	48	1846	27	301	946	505
Grp Sat Flow(s),veh/h/ln	1738	0	1743	1774	1863	1393	1774	1695	1583	1721	1695	1808
Q Serve(g_s), s	8.6	0.0	5.0	4.1	6.1	61.0	4.7	60.0	0.6	15.6	37.9	37.9
Cycle Q Clear(g_c), s	8.6	0.0	5.0	4.1	6.1	61.0	4.7	60.0	0.6	15.6	37.9	37.9
Prop In Lane	1.00		0.45	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	204	0	70	676	631	1219	103	2111	657	339	1544	824
V/C Ratio(X)	0.82	0.00	0.70	0.18	0.14	1.01	0.47	0.87	0.04	0.89	0.61	0.61
Avail Cap(c_a), veh/h	212	0	649	676	631	1219	103	2111	657	363	1544	824
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	0.00	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	83.8	0.0	85.3	37.8	41.4	31.7	82.1	48.3	3.1	80.2	37.0	37.0
Incr Delay (d2), s/veh	20.9	0.0	11.6	0.1	0.1	29.1	3.3	5.4	0.1	21.6	1.8	3.4
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	4.7	0.0	2.6	4.1	3.2	28.4	2.4	29.1	0.3	8.4	18.1	19.7
LnGrp Delay(d),s/veh	104.7	0.0	96.9	37.9	41.5	60.8	85.4	53.8	3.2	101.8	38.8	40.4
LnGrp LOS	F		F	D	D	F	F	D	A	F	D	D
Approach Vol, veh/h		216			1450			1921			1752	
Approach Delay, s/veh		102.9			57.6			53.9			50.1	
Approach LOS		F			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	21.7	78.7	68.3	11.3	14.4	86.0	14.6	65.0
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	19.0	73.0	5.0	67.0	10.0	82.0	11.0	61.0
Max Q Clear Time (g_c+I1), s	17.6	62.0	6.1	7.0	6.7	39.9	10.6	63.0
Green Ext Time (p_c), s	0.2	8.7	0.0	0.3	2.9	14.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	183	303	475	133	64	558	1976	836	48	1915	140
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	195	210	348	511	143	69	581	2266	732	50	1995	146
Adj No. of Lanes	2	1	2	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	232	836	554	300	255	622	3105	1134	124	2178	159
Arrive On Green	0.12	0.12	0.12	0.27	0.27	0.27	0.18	0.56	0.56	0.07	0.45	0.45
Sat Flow, veh/h	3442	1863	2787	3442	1863	1583	3548	5588	1583	1774	4838	352
Grp Volume(v), veh/h	195	210	348	511	143	69	581	2266	732	50	1395	746
Grp Sat Flow(s),veh/h/ln	1721	1863	1393	1721	1863	1583	1774	1863	1583	1774	1695	1801
Q Serve(g_s), s	9.5	20.0	18.0	26.0	11.6	6.2	29.1	54.6	43.9	4.9	69.2	70.0
Cycle Q Clear(g_c), s	9.5	20.0	18.0	26.0	11.6	6.2	29.1	54.6	43.9	4.9	69.2	70.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	429	232	836	554	300	255	622	3105	1134	124	1526	811
V/C Ratio(X)	0.45	0.91	0.42	0.92	0.48	0.27	0.93	0.73	0.65	0.40	0.91	0.92
Avail Cap(c_a), veh/h	440	238	845	593	321	273	650	3105	1134	124	1526	811
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.1	77.7	50.4	64.7	59.5	57.5	73.2	29.9	13.5	80.1	46.2	46.5
Incr Delay (d2), s/veh	0.8	33.7	0.3	16.8	1.0	0.5	20.2	1.5	2.8	2.1	9.9	17.3
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	4.6	12.5	7.0	13.6	6.0	2.7	16.0	28.3	30.8	2.5	34.5	38.7
LnGrp Delay(d),s/veh	73.9	111.5	50.7	81.5	60.4	57.9	93.4	31.5	16.3	82.2	56.2	63.8
LnGrp LOS	E	F	D	F	E	E	F	C	B	F	E	E
Approach Vol, veh/h		753			723			3579			2191	
Approach Delay, s/veh		73.7			75.1			38.4			59.3	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.6	104.0		26.4	35.6	85.0		33.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	100.0		23.0	33.0	77.0		31.0
Max Q Clear Time (g_c+I1), s	6.9	56.6		22.0	31.1	72.0		28.0
Green Ext Time (p_c), s	2.5	34.7		0.4	0.5	4.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	224	843	6	12	480	57	34	2	7	99	17	125
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	252	947	7	13	527	63	50	3	10	115	20	145
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.89	0.89	0.89	0.91	0.91	0.91	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	404	1424	637	189	942	112	622	171	570	704	842	715
Arrive On Green	0.04	0.13	0.13	0.00	0.10	0.10	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1774	3539	1583	1774	3186	380	1216	378	1262	1395	1863	1583
Grp Volume(v), veh/h	252	947	7	13	292	298	50	0	13	115	20	145
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1796	1216	0	1640	1395	1863	1583
Q Serve(g_s), s	8.2	22.9	0.3	0.5	14.2	14.3	2.1	0.0	0.4	4.5	0.5	5.0
Cycle Q Clear(g_c), s	8.2	22.9	0.3	0.5	14.2	14.3	2.7	0.0	0.4	4.9	0.5	5.0
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.77	1.00		1.00
Lane Grp Cap(c), veh/h	404	1424	637	189	523	531	622	0	741	704	842	715
V/C Ratio(X)	0.62	0.66	0.01	0.07	0.56	0.56	0.08	0.00	0.02	0.16	0.02	0.20
Avail Cap(c_a), veh/h	587	1848	827	285	649	658	622	0	741	704	842	715
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.89	0.89	0.89	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	33.2	23.5	22.9	35.0	35.0	14.4	0.0	13.6	15.0	13.7	14.9
Incr Delay (d2), s/veh	1.1	0.4	0.0	0.1	0.8	0.8	0.3	0.0	0.0	0.5	0.1	0.6
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	4.1	11.3	0.2	0.2	7.1	7.2	0.8	0.0	0.2	1.8	0.3	2.3
LnGrp Delay(d),s/veh	21.6	33.7	23.5	23.0	35.8	35.9	14.7	0.0	13.7	15.5	13.7	15.5
LnGrp LOS	C	C	C	C	D	D	B		B	B	B	B
Approach Vol, veh/h		1206			603			63			280	
Approach Delay, s/veh		31.1			35.6			14.5			15.4	
Approach LOS		C			D			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		44.7	5.1	40.2		44.7	14.7	30.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	6.0	47.0		25.0	20.0	33.0
Max Q Clear Time (g_c+I1), s		4.7	2.5	24.9		7.0	10.2	16.3
Green Ext Time (p_c), s		1.1	0.0	11.3		1.1	0.5	9.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	105	881	6	16	480	23	9	0	16	50	1	54
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	111	927	6	17	505	24	11	0	20	60	1	65
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.79	0.79	0.79	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	1218	545	210	1029	49	300	24	490	777	12	803
Arrive On Green	0.12	0.69	0.69	0.01	0.10	0.10	0.51	0.00	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1774	3539	1583	1774	3440	163	484	47	967	1375	24	1583
Grp Volume(v), veh/h	111	927	6	17	259	270	31	0	0	61	0	65
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1834	1498	0	0	1399	0	1583
Q Serve(g_s), s	3.7	15.4	0.1	0.6	12.5	12.5	0.0	0.0	0.0	1.0	0.0	1.9
Cycle Q Clear(g_c), s	3.7	15.4	0.1	0.6	12.5	12.5	0.8	0.0	0.0	1.8	0.0	1.9
Prop In Lane	1.00		1.00	1.00		0.09	0.35		0.65	0.98		1.00
Lane Grp Cap(c), veh/h	326	1218	545	210	529	548	814	0	0	789	0	803
V/C Ratio(X)	0.34	0.76	0.01	0.08	0.49	0.49	0.04	0.00	0.00	0.08	0.00	0.08
Avail Cap(c_a), veh/h	416	1927	862	301	885	917	814	0	0	789	0	803
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.90	0.90	0.90	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	11.6	9.2	22.3	34.1	34.1	11.1	0.0	0.0	11.3	0.0	11.4
Incr Delay (d2), s/veh	0.5	0.8	0.0	0.1	0.6	0.6	0.1	0.0	0.0	0.2	0.0	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	7.3	0.0	0.3	6.2	6.5	0.4	0.0	0.0	0.8	0.0	0.9
LnGrp Delay(d),s/veh	18.9	12.4	9.2	22.5	34.7	34.7	11.2	0.0	0.0	11.5	0.0	11.6
LnGrp LOS	B	B	A	C	C	C	B			B		B
Approach Vol, veh/h		1044			546			31			126	
Approach Delay, s/veh		13.1			34.3			11.2			11.6	
Approach LOS		B			C			B			B	

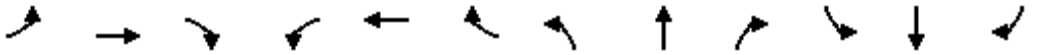
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		49.6	5.4	35.0		49.6	9.4	30.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	6.0	49.0		23.0	10.0	45.0
Max Q Clear Time (g_c+I1), s		2.8	2.6	17.4		3.9	5.7	14.5
Green Ext Time (p_c), s		0.6	0.0	12.5		0.6	0.1	12.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	804	3	8	425	65	3	1	0	72	2	92
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	74	855	3	9	462	71	6	2	0	91	3	116
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.50	0.50	0.50	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	1123	4	186	976	437	733	1019	0	830	26	867
Arrive On Green	0.09	0.62	0.62	0.02	0.55	0.55	0.55	0.55	0.00	0.55	0.55	0.55
Sat Flow, veh/h	1774	3617	13	1774	3539	1583	1268	1863	0	1373	48	1583
Grp Volume(v), veh/h	74	418	440	9	462	71	6	2	0	94	0	116
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1583	1268	1863	0	1421	0	1583
Q Serve(g_s), s	2.6	15.3	15.3	0.3	7.1	2.0	0.2	0.0	0.0	2.8	0.0	3.2
Cycle Q Clear(g_c), s	2.6	15.3	15.3	0.3	7.1	2.0	3.1	0.0	0.0	2.9	0.0	3.2
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.00	0.97		1.00
Lane Grp Cap(c), veh/h	328	549	578	186	976	437	733	1019	0	856	0	867
V/C Ratio(X)	0.23	0.76	0.76	0.05	0.47	0.16	0.01	0.00	0.00	0.11	0.00	0.13
Avail Cap(c_a), veh/h	428	904	951	288	1691	756	733	1019	0	856	0	867
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.64	0.95	0.95	0.95	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.4	14.7	14.7	23.8	16.2	15.1	10.6	9.2	0.0	9.9	0.0	10.0
Incr Delay (d2), s/veh	0.2	1.4	1.4	0.1	0.3	0.2	0.0	0.0	0.0	0.3	0.0	0.3
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	7.4	7.8	0.2	3.4	0.9	0.1	0.0	0.0	1.2	0.0	1.5
LnGrp Delay(d),s/veh	20.6	16.1	16.0	23.9	16.6	15.2	10.6	9.2	0.0	10.1	0.0	10.3
LnGrp LOS	C	B	B	C	B	B	B	A		B		B
Approach Vol, veh/h		932			542			8			210	
Approach Delay, s/veh		16.4			16.5			10.3			10.2	
Approach LOS		B			B			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		53.3	4.8	31.9		53.3	7.9	28.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	46.0		26.0	9.0	43.0
Max Q Clear Time (g_c+I1), s		5.1	2.3	17.3		5.2	4.6	9.1
Green Ext Time (p_c), s		0.8	0.0	10.6		0.8	0.0	11.2

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	32	933	2	14	396	64	2	0	7	52	0	52
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	34	993	2	16	460	74	3	0	10	58	0	58
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.86	0.86	0.86	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	1260	3	198	1193	534	722	0	798	781	0	798
Arrive On Green	0.05	0.70	0.70	0.03	0.67	0.67	0.50	0.00	0.50	0.50	0.00	0.50
Sat Flow, veh/h	1774	3624	7	1774	3539	1583	1340	0	1583	1390	0	1583
Grp Volume(v), veh/h	34	485	510	16	460	74	3	0	10	58	0	58
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1583	1340	0	1583	1390	0	1583
Q Serve(g_s), s	1.1	16.6	16.6	0.5	5.2	1.5	0.1	0.0	0.3	1.9	0.0	1.7
Cycle Q Clear(g_c), s	1.1	16.6	16.6	0.5	5.2	1.5	2.3	0.0	0.3	2.2	0.0	1.7
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	368	615	647	198	1193	534	722	0	798	781	0	798
V/C Ratio(X)	0.09	0.79	0.79	0.08	0.39	0.14	0.00	0.00	0.01	0.07	0.00	0.07
Avail Cap(c_a), veh/h	441	1003	1055	290	2006	897	722	0	798	781	0	798
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	11.5	11.5	20.2	10.6	10.0	12.2	0.0	11.1	11.7	0.0	11.5
Incr Delay (d2), s/veh	0.1	1.4	1.4	0.2	0.2	0.1	0.0	0.0	0.0	0.2	0.0	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	0.5	8.1	8.5	0.3	2.5	0.7	0.0	0.0	0.1	0.8	0.0	0.8
LnGrp Delay(d),s/veh	18.4	12.9	12.8	20.4	10.8	10.1	12.2	0.0	11.2	11.9	0.0	11.7
LnGrp LOS	B	B	B	C	B	B	B		B	B		B
Approach Vol, veh/h		1029			550			13			116	
Approach Delay, s/veh		13.1			11.0			11.4			11.8	
Approach LOS		B			B			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		49.4	5.3	35.3		49.4	6.3	34.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	6.0	51.0		21.0	6.0	51.0
Max Q Clear Time (g_c+I1), s		4.3	2.5	18.6		4.2	3.1	7.2
Green Ext Time (p_c), s		0.4	0.0	12.7		0.4	0.0	13.9

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	907	68	84	420	0	55	0	47	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	91	91	92	81	92	81	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	945	71	92	462	0	68	0	58	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	462	0	0	1016	0	0	1395	1626	508
Stage 1	-	-	-	-	-	-	980	980	-
Stage 2	-	-	-	-	-	-	415	646	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	1095	-	-	678	-	-	132	101	510
Stage 1	-	-	-	-	-	-	324	326	-
Stage 2	-	-	-	-	-	-	635	465	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1095	-	-	678	-	-	114	0	510
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	0	-
Stage 1	-	-	-	-	-	-	324	0	-
Stage 2	-	-	-	-	-	-	549	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	46.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	114	510	1095	-	-	678	-	-
HCM Lane V/C Ratio	0.596	0.114	-	-	-	0.136	-	-
HCM Control Delay (s)	75	13	0	-	-	11.1	-	-
HCM Lane LOS	F	B	A	-	-	B	-	-
HCM 95th %tile Q(veh)	2.9	0.4	0	-	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	65	818	41	60	437	252	34	12	41	304	33	56
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	69	870	44	61	446	257	49	17	59	313	34	58
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.98	0.98	0.98	0.69	0.69	0.69	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1122	57	210	1144	512	62	640	544	400	791	672
Arrive On Green	0.05	0.44	0.44	0.04	0.32	0.32	0.04	0.34	0.34	0.12	0.42	0.42
Sat Flow, veh/h	1774	3428	173	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	69	449	465	61	446	257	49	17	59	313	34	58
Grp Sat Flow(s),veh/h/ln	1774	1770	1832	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	2.3	19.5	19.5	2.1	8.8	11.8	2.5	0.5	2.3	8.0	1.0	2.0
Cycle Q Clear(g_c), s	2.3	19.5	19.5	2.1	8.8	11.8	2.5	0.5	2.3	8.0	1.0	2.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	579	600	210	1144	512	62	640	544	400	791	672
V/C Ratio(X)	0.22	0.78	0.78	0.29	0.39	0.50	0.79	0.03	0.11	0.78	0.04	0.09
Avail Cap(c_a), veh/h	326	688	713	246	1416	633	118	640	544	574	791	672
HCM Platoon Ratio	1.33	1.33	1.33	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	19.2	22.6	22.6	21.4	23.6	24.6	43.1	19.6	20.2	38.7	15.2	15.5
Incr Delay (d2), s/veh	0.3	4.7	4.5	0.8	0.2	0.8	19.2	0.1	0.4	4.5	0.1	0.3
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	1.1	10.1	10.5	1.0	4.3	5.2	1.5	0.3	1.1	4.0	0.5	0.9
LnGrp Delay(d),s/veh	19.6	27.3	27.1	22.2	23.8	25.4	62.2	19.7	20.6	43.1	15.3	15.7
LnGrp LOS	B	C	C	C	C	C	E	B	C	D	B	B
Approach Vol, veh/h		983			764			125			405	
Approach Delay, s/veh		26.6			24.2			36.8			36.9	
Approach LOS		C			C			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	14.5	34.9	7.2	33.5	7.2	42.2	7.6	33.1
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	15.0	19.0	5.0	35.0	6.0	28.0	4.0	36.0
Max Q Clear Time (g_c+I1), s	10.0	4.3	4.1	21.5	4.5	4.0	4.3	13.8
Green Ext Time (p_c), s	0.5	0.5	0.0	8.0	0.0	0.6	0.0	10.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	1052	168	479	542	11	181	17	929	15	10	21
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	7	1073	171	494	559	11	189	18	968	21	14	29
Adj No. of Lanes	1	2	1	2	2	1	1	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	1101	493	745	1842	824	517	632	880	269	184	381
Arrive On Green	0.01	0.31	0.31	0.22	0.52	0.52	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1358	1863	1583	568	542	1123
Grp Volume(v), veh/h	7	1073	171	494	559	11	189	18	968	21	0	43
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1358	1863	1583	568	0	1665
Q Serve(g_s), s	0.4	27.0	7.5	11.8	8.1	0.3	9.9	0.6	30.5	2.3	0.0	1.6
Cycle Q Clear(g_c), s	0.4	27.0	7.5	11.8	8.1	0.3	11.4	0.6	30.5	2.9	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	13	1101	493	745	1842	824	517	632	880	269	0	565
V/C Ratio(X)	0.55	0.97	0.35	0.66	0.30	0.01	0.37	0.03	1.10	0.08	0.00	0.08
Avail Cap(c_a), veh/h	79	1101	493	1262	2242	1003	517	632	880	269	0	565
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	0.00	1.00
Uniform Delay (d), s/veh	44.5	30.6	23.9	32.3	12.3	10.4	24.1	19.8	20.0	20.8	0.0	20.2
Incr Delay (d2), s/veh	32.7	21.1	0.4	1.0	0.1	0.0	2.0	0.1	61.6	0.6	0.0	0.3
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	0.3	16.3	3.3	5.7	4.0	0.1	4.0	0.3	28.1	0.4	0.0	0.8
LnGrp Delay(d),s/veh	77.2	51.8	24.4	33.3	12.4	10.4	26.0	19.9	81.6	21.4	0.0	20.4
LnGrp LOS	E	D	C	C	B	B	C	B	F	C		C
Approach Vol, veh/h		1251			1064			1175			64	
Approach Delay, s/veh		48.2			22.1			71.8			20.7	
Approach LOS		D			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.5	23.5	32.0		34.5	4.6	50.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	33.0	28.0		17.0	4.0	57.0
Max Q Clear Time (g_c+I1), s		32.5	13.8	29.0		4.9	2.4	10.1
Green Ext Time (p_c), s		0.0	5.7	0.0		4.8	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay	47.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	29	20	258	33	198	38	1854	172	426	1901	53
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	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	31	21	277	0	236	39	1892	176	448	2001	56
Adj No. of Lanes	1	1	1	2	0	2	1	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.98	0.98	0.98	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	52	44	328	0	230	239	3056	283	500	3334	93
Arrive On Green	0.05	0.03	0.03	0.09	0.00	0.07	0.13	0.65	0.65	0.15	0.66	0.66
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	4737	438	3442	5086	142
Grp Volume(v), veh/h	65	31	21	277	0	236	39	1351	717	448	1333	724
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1785	1721	1695	1838
Q Serve(g_s), s	6.5	3.0	2.4	13.8	0.0	10.4	3.5	42.3	42.8	23.0	40.2	40.3
Cycle Q Clear(g_c), s	6.5	3.0	2.4	13.8	0.0	10.4	3.5	42.3	42.8	23.0	40.2	40.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.08
Lane Grp Cap(c), veh/h	85	52	44	328	0	230	239	2187	1152	500	2222	1205
V/C Ratio(X)	0.76	0.59	0.47	0.84	0.00	1.03	0.16	0.62	0.62	0.90	0.60	0.60
Avail Cap(c_a), veh/h	128	166	141	414	0	422	239	2187	1152	650	2222	1205
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	0.91	0.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	84.6	86.5	86.2	80.4	0.0	52.8	68.9	18.8	18.9	75.6	17.6	17.6
Incr Delay (d2), s/veh	13.6	10.3	7.6	11.1	0.0	38.8	0.3	1.3	2.5	12.5	1.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.7	1.1	7.3	0.0	5.8	1.7	20.1	21.9	11.8	19.1	21.1
LnGrp Delay(d),s/veh	98.2	96.7	93.8	91.5	0.0	91.7	69.2	20.2	21.5	88.0	18.8	19.8
LnGrp LOS	F	F	F	F		F	E	C	C	F	B	B
Approach Vol, veh/h		117			513			2107			2505	
Approach Delay, s/veh		97.0			91.6			21.5			31.5	
Approach LOS		F			F			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	30.2	120.1	20.7	9.1	28.3	122.0	12.7	17.0
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	34.0	93.0	21.0	16.0	9.0	118.0	13.0	24.0
Max Q Clear Time (g_c+I1), s	25.0	44.8	15.8	5.0	5.5	42.3	8.5	12.4
Green Ext Time (p_c), s	1.1	26.8	0.6	0.1	0.1	31.6	0.5	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	199	251	162	45	210	75	117	60	77	43	52	156
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	221	279	180	51	239	85	131	67	87	45	55	164
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	791	354	259	483	161	733	1134	964	810	1078	964
Arrive On Green	0.13	0.22	0.22	0.03	0.13	0.13	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1774	3539	1583	1774	3775	1256	1157	1863	1583	1228	1770	1583
Grp Volume(v), veh/h	221	279	180	51	213	111	131	67	87	45	55	164
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1641	1157	1863	1583	1228	1770	1583
Q Serve(g_s), s	9.2	6.0	9.0	2.2	5.3	5.7	5.0	1.3	2.0	1.4	1.1	4.1
Cycle Q Clear(g_c), s	9.2	6.0	9.0	2.2	5.3	5.7	9.1	1.3	2.0	2.7	1.1	4.1
Prop In Lane	1.00		1.00	1.00		0.77	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	791	354	259	433	210	733	1134	964	810	1078	964
V/C Ratio(X)	0.58	0.35	0.51	0.20	0.49	0.53	0.18	0.06	0.09	0.06	0.05	0.17
Avail Cap(c_a), veh/h	641	1455	651	376	791	383	733	1134	964	810	1078	964
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)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	29.4	30.6	32.5	36.5	36.7	9.7	7.1	7.3	7.7	7.1	7.7
Incr Delay (d2), s/veh	0.7	0.1	0.6	0.4	0.9	2.1	0.5	0.1	0.2	0.1	0.1	0.4
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	4.6	2.9	4.0	1.1	2.5	2.7	1.7	0.7	0.9	0.5	0.6	1.9
LnGrp Delay(d),s/veh	27.8	29.6	31.2	32.9	37.4	38.8	10.2	7.2	7.5	7.8	7.2	8.1
LnGrp LOS	C	C	C	C	D	D	B	A	A	A	A	A
Approach Vol, veh/h		680			375			285			264	
Approach Delay, s/veh		29.4			37.2			8.7			7.8	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.8	7.1	24.1		58.8	15.7	15.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0	9.0	37.0		32.0	25.0	21.0
Max Q Clear Time (g_c+I1), s		11.1	4.2	11.0		6.1	11.2	7.7
Green Ext Time (p_c), s		2.7	0.0	4.8		2.8	0.5	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	89	258	23	30	212	81	41	20	61	123	26	56
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	105	304	27	36	255	98	49	24	73	140	30	64
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.84	0.84	0.84	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	568	50	218	465	208	939	1244	1057	938	1244	1057
Arrive On Green	0.07	0.17	0.17	0.03	0.13	0.13	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1774	3291	290	1774	3539	1583	1297	1863	1583	1293	1863	1583
Grp Volume(v), veh/h	105	163	168	36	255	98	49	24	73	140	30	64
Grp Sat Flow(s),veh/h/ln	1774	1770	1812	1774	1770	1583	1297	1863	1583	1293	1863	1583
Q Serve(g_s), s	4.4	7.5	7.6	1.6	6.1	5.2	1.2	0.4	1.4	3.7	0.5	1.3
Cycle Q Clear(g_c), s	4.4	7.5	7.6	1.6	6.1	5.2	1.7	0.4	1.4	4.1	0.5	1.3
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	305	313	218	465	208	939	1244	1057	938	1244	1057
V/C Ratio(X)	0.40	0.53	0.54	0.16	0.55	0.47	0.05	0.02	0.07	0.15	0.02	0.06
Avail Cap(c_a), veh/h	421	629	644	329	1022	457	939	1244	1057	938	1244	1057
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	29.6	33.9	34.0	32.7	36.6	36.2	5.3	5.0	5.2	5.7	5.0	5.2
Incr Delay (d2), s/veh	1.0	1.4	1.4	0.4	1.0	1.7	0.1	0.0	0.1	0.3	0.0	0.1
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	2.2	3.8	4.0	0.8	3.0	2.4	0.4	0.2	0.7	1.4	0.3	0.6
LnGrp Delay(d),s/veh	30.6	35.4	35.4	33.0	37.6	37.9	5.4	5.1	5.3	6.1	5.1	5.3
LnGrp LOS	C	D	D	C	D	D	A	A	A	A	A	A
Approach Vol, veh/h		436			389			146			234	
Approach Delay, s/veh		34.2			37.2			5.3			5.7	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		64.1	6.4	19.5		64.1	10.1	15.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		38.0	8.0	32.0		38.0	14.0	26.0
Max Q Clear Time (g_c+I1), s		3.7	3.6	9.6		6.1	6.4	8.1
Green Ext Time (p_c), s		1.4	0.0	4.0		1.4	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	291	159	58	130	149	473	85	1945	100	959	2177	125
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	306	167	61	148	169	538	87	1985	102	1020	2316	133
Adj No. of Lanes	2	1	0	1	1	2	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.88	0.88	0.88	0.98	0.98	0.98	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	161	59	158	176	1115	105	2119	660	1052	3264	186
Arrive On Green	0.09	0.12	0.12	0.07	0.09	0.09	0.06	0.42	0.42	0.31	0.66	0.66
Sat Flow, veh/h	3476	1316	481	1774	1863	2787	1774	5085	1583	3442	4923	280
Grp Volume(v), veh/h	306	0	228	148	169	538	87	1985	102	1020	1589	860
Grp Sat Flow(s),veh/h/ln	1738	0	1796	1774	1863	1393	1774	1695	1583	1721	1695	1813
Q Serve(g_s), s	15.7	0.0	22.0	12.0	16.3	5.0	8.7	67.2	5.9	52.7	53.5	54.8
Cycle Q Clear(g_c), s	15.7	0.0	22.0	12.0	16.3	5.0	8.7	67.2	5.9	52.7	53.5	54.8
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	328	0	220	158	176	1115	105	2119	660	1052	2248	1202
V/C Ratio(X)	0.93	0.00	1.04	0.94	0.96	0.48	0.83	0.94	0.15	0.97	0.71	0.72
Avail Cap(c_a), veh/h	328	0	220	158	176	1115	158	2119	660	1052	2248	1202
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	0.00	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	80.9	0.0	79.0	71.6	81.2	23.0	83.8	50.2	21.5	61.7	19.2	19.5
Incr Delay (d2), s/veh	32.6	0.0	71.2	52.6	56.2	0.3	19.5	9.5	0.5	20.8	1.9	3.7
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	9.1	0.0	15.3	8.9	11.1	7.3	4.9	33.3	2.6	28.1	25.5	28.5
LnGrp Delay(d),s/veh	113.5	0.0	150.2	124.2	137.3	23.3	103.3	59.7	21.9	82.4	21.1	23.1
LnGrp LOS	F		F	F	F	C	F	E	C	F	C	C
Approach Vol, veh/h		534			855			2174			3469	
Approach Delay, s/veh		129.2			63.3			59.7			39.7	
Approach LOS		F			E			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	59.0	79.0	16.0	26.0	14.7	123.3	21.0	21.0
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	55.0	75.0	12.0	22.0	16.0	114.0	17.0	17.0
Max Q Clear Time (g_c+I1), s	54.7	69.2	14.0	24.0	10.7	56.8	17.7	18.3
Green Ext Time (p_c), s	0.1	5.1	0.0	0.0	0.1	46.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	469	487	1004	834	321	81	1046	2800	730	123	2019	266
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	494	513	1057	916	353	89	1078	2887	753	128	2103	277
Adj No. of Lanes	2	1	2	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	669	362	1099	650	352	299	710	2701	1064	79	1494	194
Arrive On Green	0.19	0.19	0.19	0.06	0.06	0.06	0.20	0.48	0.48	0.04	0.33	0.33
Sat Flow, veh/h	3442	1863	2787	3442	1863	1583	3548	5588	1583	1774	4558	590
Grp Volume(v), veh/h	494	513	1057	916	353	89	1078	2887	753	128	1555	825
Grp Sat Flow(s),veh/h/ln	1721	1863	1393	1721	1863	1583	1774	1863	1583	1774	1695	1759
Q Serve(g_s), s	24.3	35.0	35.0	34.0	34.0	9.7	36.0	87.0	53.5	8.0	59.0	59.0
Cycle Q Clear(g_c), s	24.3	35.0	35.0	34.0	34.0	9.7	36.0	87.0	53.5	8.0	59.0	59.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	669	362	1099	650	352	299	710	2701	1064	79	1111	576
V/C Ratio(X)	0.74	1.42	0.96	1.41	1.00	0.30	1.52	1.07	0.71	1.62	1.40	1.43
Avail Cap(c_a), veh/h	669	362	1099	650	352	299	710	2701	1064	79	1111	576
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.2	72.5	53.2	84.4	84.4	73.0	72.0	46.5	18.4	86.0	60.5	60.5
Incr Delay (d2), s/veh	4.3	203.0	18.6	189.7	38.3	0.3	240.8	39.2	4.0	330.9	185.2	203.9
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	12.0	38.4	28.4	33.4	21.3	4.3	41.4	54.6	38.0	11.2	56.2	61.3
LnGrp Delay(d),s/veh	72.5	275.5	71.7	274.1	122.7	73.3	312.8	85.7	22.4	416.9	245.7	264.4
LnGrp LOS	E	F	E	F	F	E	F	F	C	F	F	F
Approach Vol, veh/h		2064			1358			4718			2508	
Approach Delay, s/veh		122.6			221.6			127.5			260.6	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	91.0		39.0	40.0	63.0		38.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	87.0		35.0	36.0	59.0		34.0
Max Q Clear Time (g_c+I1), s	10.0	89.0		37.0	38.0	61.0		36.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	169.9
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	386	932	11	27	825	106	39	10	19	154	15	317
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	398	961	11	28	842	108	51	13	25	173	17	356
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.98	0.98	0.98	0.76	0.76	0.76	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	447	1728	773	272	1027	132	432	203	391	545	663	564
Arrive On Green	0.12	0.33	0.33	0.01	0.11	0.11	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1774	3539	1583	1774	3156	405	1005	571	1098	1364	1863	1583
Grp Volume(v), veh/h	398	961	11	28	472	478	51	0	38	173	17	356
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1791	1005	0	1669	1364	1863	1583
Q Serve(g_s), s	13.8	20.1	0.4	0.9	23.5	23.5	3.1	0.0	1.4	8.6	0.5	16.8
Cycle Q Clear(g_c), s	13.8	20.1	0.4	0.9	23.5	23.5	3.7	0.0	1.4	10.0	0.5	16.8
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	447	1728	773	272	576	583	432	0	594	545	663	564
V/C Ratio(X)	0.89	0.56	0.01	0.10	0.82	0.82	0.12	0.00	0.06	0.32	0.03	0.63
Avail Cap(c_a), veh/h	611	2006	897	312	590	597	432	0	594	545	663	564
HCM Platoon Ratio	0.67	0.67	0.67	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.66	0.66	0.66	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	22.3	15.6	19.9	37.6	37.6	20.0	0.0	19.1	22.4	18.8	24.1
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.1	6.0	5.9	0.6	0.0	0.2	1.5	0.1	5.3
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	9.9	9.8	0.2	0.5	12.5	12.7	0.9	0.0	0.7	3.5	0.3	8.1
LnGrp Delay(d),s/veh	24.7	22.3	15.6	20.0	43.6	43.5	20.6	0.0	19.3	23.9	18.9	29.4
LnGrp LOS	C	C	B	C	D	D	C		B	C	B	C
Approach Vol, veh/h		1370			978			89			546	
Approach Delay, s/veh		22.9			42.8			20.0			27.3	
Approach LOS		C			D			C			C	

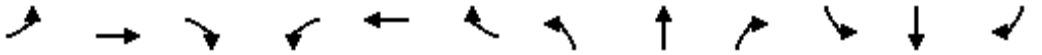
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		36.0	6.0	48.0		36.0	20.7	33.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	4.0	51.0		23.0	25.0	30.0
Max Q Clear Time (g_c+I1), s		5.7	2.9	22.1		18.8	15.8	25.5
Green Ext Time (p_c), s		2.2	0.0	16.7		1.0	0.9	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	304	804	17	35	718	84	12	3	29	114	6	165
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	313	829	18	39	798	93	14	4	35	137	7	199
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.90	0.90	0.90	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	1520	680	330	989	115	160	66	342	545	26	648
Arrive On Green	0.30	0.86	0.86	0.06	0.62	0.62	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1774	3539	1583	1774	3194	372	268	162	835	1141	63	1583
Grp Volume(v), veh/h	313	829	18	39	442	449	53	0	0	144	0	199
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1797	1265	0	0	1205	0	1583
Q Serve(g_s), s	10.6	5.6	0.1	1.3	17.1	17.1	0.2	0.0	0.0	0.0	0.0	7.6
Cycle Q Clear(g_c), s	10.6	5.6	0.1	1.3	17.1	17.1	11.5	0.0	0.0	11.3	0.0	7.6
Prop In Lane	1.00		1.00	1.00		0.21	0.26		0.66	0.95		1.00
Lane Grp Cap(c), veh/h	416	1520	680	330	548	556	569	0	0	571	0	648
V/C Ratio(X)	0.75	0.55	0.03	0.12	0.81	0.81	0.09	0.00	0.00	0.25	0.00	0.31
Avail Cap(c_a), veh/h	627	2045	915	359	629	639	569	0	0	571	0	648
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.84	0.84	0.84	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	4.0	3.6	19.6	15.1	15.1	16.4	0.0	0.0	19.0	0.0	17.9
Incr Delay (d2), s/veh	2.5	0.3	0.0	0.1	5.7	5.7	0.3	0.0	0.0	1.1	0.0	1.2
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	5.2	2.6	0.1	0.6	9.0	9.1	0.8	0.0	0.0	2.7	0.0	3.5
LnGrp Delay(d),s/veh	17.6	4.3	3.6	19.8	20.8	20.8	16.7	0.0	0.0	20.0	0.0	19.2
LnGrp LOS	B	A	A	B	C	C	B			C		B
Approach Vol, veh/h		1160			930			53			343	
Approach Delay, s/veh		7.9			20.8			16.7			19.5	
Approach LOS		A			C			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		40.9	6.5	42.7		40.9	17.3	31.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		22.0	4.0	52.0		22.0	24.0	32.0
Max Q Clear Time (g_c+I1), s		13.5	3.3	7.6		13.3	12.6	19.1
Green Ext Time (p_c), s		1.2	0.0	17.7		1.2	0.7	8.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	163	745	19	39	575	100	34	8	8	113	0	206
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	168	768	20	39	581	101	43	10	10	136	0	248
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.99	0.99	0.99	0.79	0.79	0.79	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	1176	31	222	966	432	582	433	433	773	0	800
Arrive On Green	0.06	0.22	0.22	0.01	0.09	0.09	0.51	0.51	0.51	0.51	0.00	0.51
Sat Flow, veh/h	1774	3524	92	1774	3539	1583	1127	856	856	1370	0	1583
Grp Volume(v), veh/h	168	386	402	39	581	101	43	0	20	136	0	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1847	1774	1770	1583	1127	0	1712	1370	0	1583
Q Serve(g_s), s	5.8	17.8	17.8	1.4	14.2	5.3	2.0	0.0	0.5	4.9	0.0	8.3
Cycle Q Clear(g_c), s	5.8	17.8	17.8	1.4	14.2	5.3	7.4	0.0	0.5	5.4	0.0	8.3
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	323	590	616	222	966	432	582	0	865	773	0	800
V/C Ratio(X)	0.52	0.65	0.65	0.18	0.60	0.23	0.07	0.00	0.02	0.18	0.00	0.31
Avail Cap(c_a), veh/h	482	826	862	291	1258	563	582	0	865	773	0	800
HCM Platoon Ratio	0.67	0.67	0.67	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.87	0.87	0.87	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.4	30.2	30.2	23.9	36.2	32.2	14.4	0.0	11.1	12.5	0.0	13.1
Incr Delay (d2), s/veh	1.2	1.1	1.1	0.3	0.5	0.2	0.2	0.0	0.0	0.5	0.0	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	2.9	8.9	9.3	0.7	7.0	2.4	0.6	0.0	0.3	2.0	0.0	3.8
LnGrp Delay(d),s/veh	22.6	31.3	31.3	24.2	36.8	32.4	14.6	0.0	11.2	13.0	0.0	14.1
LnGrp LOS	C	C	C	C	D	C	B		B	B		B
Approach Vol, veh/h		956			721			63			384	
Approach Delay, s/veh		29.8			35.5			13.5			13.7	
Approach LOS		C			D			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		49.5	6.5	34.0		49.5	11.9	28.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0	6.0	42.0		30.0	16.0	32.0
Max Q Clear Time (g_c+I1), s		9.4	3.4	19.8		10.3	7.8	16.2
Green Ext Time (p_c), s		1.9	0.0	10.1		1.8	0.3	8.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	87	810	6	12	550	136	7	2	6	136	3	162
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	95	880	7	12	573	142	13	4	11	156	3	186
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.54	0.54	0.54	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	1197	10	208	1029	461	624	230	632	791	14	827
Arrive On Green	0.11	0.67	0.67	0.01	0.29	0.29	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1774	3599	29	1774	3539	1583	1189	440	1209	1362	28	1583
Grp Volume(v), veh/h	95	433	454	12	573	142	13	0	15	159	0	186
Grp Sat Flow(s),veh/h/ln	1774	1770	1858	1774	1770	1583	1189	0	1649	1389	0	1583
Q Serve(g_s), s	3.2	14.4	14.4	0.4	12.3	6.3	0.5	0.0	0.4	5.5	0.0	5.7
Cycle Q Clear(g_c), s	3.2	14.4	14.4	0.4	12.3	6.3	6.4	0.0	0.4	5.9	0.0	5.7
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.73	0.98		1.00
Lane Grp Cap(c), veh/h	287	589	618	208	1029	461	624	0	862	805	0	827
V/C Ratio(X)	0.33	0.74	0.74	0.06	0.56	0.31	0.02	0.00	0.02	0.20	0.00	0.22
Avail Cap(c_a), veh/h	350	826	867	306	1573	704	624	0	862	805	0	827
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	12.5	12.5	22.7	27.0	24.9	13.4	0.0	10.4	11.8	0.0	11.6
Incr Delay (d2), s/veh	0.5	1.5	1.5	0.1	0.5	0.4	0.1	0.0	0.0	0.5	0.0	0.6
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	1.6	7.0	7.3	0.2	6.1	2.8	0.2	0.0	0.2	2.2	0.0	2.6
LnGrp Delay(d),s/veh	19.8	14.0	13.9	22.8	27.5	25.2	13.5	0.0	10.4	12.3	0.0	12.3
LnGrp LOS	B	B	B	C	C	C	B		B	B		B
Approach Vol, veh/h		982			727			28			345	
Approach Delay, s/veh		14.5			27.0			11.8			12.3	
Approach LOS		B			C			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		51.0	5.0	33.9		51.0	8.8	30.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0	6.0	42.0		30.0	8.0	40.0
Max Q Clear Time (g_c+I1), s		8.4	2.4	16.4		7.9	5.2	14.3
Green Ext Time (p_c), s		1.6	0.0	11.8		1.6	0.0	11.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	7	906	59	84	646	0	45	0	38	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	97	97	92	84	92	84	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	924	60	87	666	0	54	0	45	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	666	0	0	985	0	0	1475	1808	492
Stage 1	-	-	-	-	-	-	969	969	-
Stage 2	-	-	-	-	-	-	506	839	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	919	-	-	697	-	-	117	78	522
Stage 1	-	-	-	-	-	-	329	330	-
Stage 2	-	-	-	-	-	-	571	379	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	919	-	-	697	-	-	102	0	522
Mov Cap-2 Maneuver	-	-	-	-	-	-	102	0	-
Stage 1	-	-	-	-	-	-	326	0	-
Stage 2	-	-	-	-	-	-	500	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	1.3	45.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	102	522	919	-	-	697	-	-
HCM Lane V/C Ratio	0.525	0.087	0.008	-	-	0.124	-	-
HCM Control Delay (s)	74	12.6	8.9	-	-	10.9	-	-
HCM Lane LOS	F	B	A	-	-	B	-	-
HCM 95th %tile Q(veh)	2.4	0.3	0	-	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	191	689	28	27	656	352	14	14	36	468	12	78
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	203	733	30	29	698	374	22	22	56	493	13	82
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.64	0.64	0.64	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	1222	50	292	964	431	33	515	438	586	797	677
Arrive On Green	0.21	0.71	0.71	0.02	0.27	0.27	0.02	0.28	0.28	0.17	0.43	0.43
Sat Flow, veh/h	1774	3466	142	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	203	374	389	29	698	374	22	22	56	493	13	82
Grp Sat Flow(s),veh/h/ln	1774	1770	1838	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	7.1	9.7	9.7	1.1	16.1	20.3	1.1	0.8	2.4	12.5	0.4	2.8
Cycle Q Clear(g_c), s	7.1	9.7	9.7	1.1	16.1	20.3	1.1	0.8	2.4	12.5	0.4	2.8
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	624	648	292	964	431	33	515	438	586	797	677
V/C Ratio(X)	0.65	0.60	0.60	0.10	0.72	0.87	0.66	0.04	0.13	0.84	0.02	0.12
Avail Cap(c_a), veh/h	405	688	715	330	983	440	99	515	438	727	797	677
HCM Platoon Ratio	2.00	2.00	2.00	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	18.8	10.0	10.0	22.8	29.7	31.2	43.9	23.8	24.4	36.2	14.8	15.5
Incr Delay (d2), s/veh	2.3	1.2	1.2	0.1	2.6	16.4	20.0	0.2	0.6	7.4	0.0	0.4
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	3.6	4.8	5.0	0.5	8.2	10.7	0.7	0.4	1.1	6.6	0.2	1.3
LnGrp Delay(d),s/veh	21.1	11.2	11.2	22.9	32.3	47.6	63.8	24.0	25.0	43.5	14.9	15.9
LnGrp LOS	C	B	B	C	C	D	E	C	C	D	B	B
Approach Vol, veh/h		966			1101			100			588	
Approach Delay, s/veh		13.3			37.3			33.3			39.0	
Approach LOS		B			D			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	19.3	28.9	6.1	35.7	5.7	42.5	13.3	28.5
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	19.0	16.0	4.0	35.0	5.0	30.0	14.0	25.0
Max Q Clear Time (g_c+I1), s	14.5	4.4	3.1	11.7	3.1	4.8	9.1	22.3
Green Ext Time (p_c), s	0.8	0.4	0.0	12.5	0.0	0.6	0.2	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	739	215	726	637	8	242	17	1000	11	15	3
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	10	786	229	789	692	9	263	18	1087	12	16	3
Adj No. of Lanes	1	2	1	2	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	826	369	1076	1897	849	515	597	1003	240	489	92
Arrive On Green	0.01	0.23	0.23	0.31	0.54	0.54	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1388	1863	1583	508	1526	286
Grp Volume(v), veh/h	10	786	229	789	692	9	263	18	1087	12	0	19
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1388	1863	1583	508	0	1812
Q Serve(g_s), s	0.5	19.7	11.7	18.4	10.1	0.2	14.4	0.6	28.9	1.5	0.0	0.6
Cycle Q Clear(g_c), s	0.5	19.7	11.7	18.4	10.1	0.2	15.1	0.6	28.9	2.1	0.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	17	826	369	1076	1897	849	515	597	1003	240	0	581
V/C Ratio(X)	0.57	0.95	0.62	0.73	0.36	0.01	0.51	0.03	1.08	0.05	0.00	0.03
Avail Cap(c_a), veh/h	79	826	369	1453	2163	968	515	597	1003	240	0	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.4	34.0	30.9	27.6	12.0	9.7	26.2	21.0	16.5	21.7	0.0	21.0
Incr Delay (d2), s/veh	26.4	20.5	3.2	1.3	0.1	0.0	3.6	0.1	54.0	0.4	0.0	0.1
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	0.4	12.0	5.4	9.0	4.9	0.1	6.1	0.3	27.2	0.2	0.0	0.3
LnGrp Delay(d),s/veh	70.7	54.5	34.1	28.9	12.2	9.7	29.7	21.1	70.5	22.1	0.0	21.1
LnGrp LOS	E	D	C	C	B	A	C	C	F	C		C
Approach Vol, veh/h		1025			1490			1368			31	
Approach Delay, s/veh		50.1			21.0			62.0			21.5	
Approach LOS		D			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.9	32.1	25.0		32.9	4.9	52.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		19.0	38.0	21.0		19.0	4.0	55.0
Max Q Clear Time (g_c+I1), s		30.9	20.4	21.7		4.1	2.5	12.1
Green Ext Time (p_c), s		0.0	7.7	0.0		6.3	0.0	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	43.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	87	66	30	489	102	363	51	1946	298	739	1695	66
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	100	76	34	526	320	250	52	1966	301	754	1730	67
Adj No. of Lanes	1	1	1	2	1	1	1	3	1	2	3	0
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.99	0.99	0.99	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	98	83	691	336	286	123	2201	685	795	2987	116
Arrive On Green	0.07	0.05	0.05	0.33	0.30	0.30	0.07	0.43	0.43	0.23	0.59	0.59
Sat Flow, veh/h	1774	1863	1583	3548	1863	1583	1774	5085	1583	3442	5024	194
Grp Volume(v), veh/h	100	76	34	526	320	250	52	1966	301	754	1167	630
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1695	1583	1721	1695	1828
Q Serve(g_s), s	10.0	7.3	3.7	23.9	30.3	17.9	5.1	64.3	13.9	38.8	38.3	38.4
Cycle Q Clear(g_c), s	10.0	7.3	3.7	23.9	30.3	17.9	5.1	64.3	13.9	38.8	38.3	38.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	118	98	83	691	336	286	123	2201	685	795	2015	1087
V/C Ratio(X)	0.85	0.78	0.41	0.76	0.95	0.87	0.42	0.89	0.44	0.95	0.58	0.58
Avail Cap(c_a), veh/h	128	166	141	691	342	290	123	2201	685	822	2015	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.69	0.69	0.69	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.1	84.2	82.6	57.0	62.1	26.8	80.3	47.2	12.0	68.2	22.6	22.6
Incr Delay (d2), s/veh	36.0	12.3	3.2	3.5	28.3	18.0	2.3	6.1	2.0	19.6	1.2	2.3
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	6.1	4.1	1.7	12.0	18.2	9.2	2.6	31.3	6.4	20.7	18.2	19.9
LnGrp Delay(d),s/veh	119.1	96.6	85.8	60.4	90.4	44.8	82.6	53.3	14.0	87.8	23.8	24.8
LnGrp LOS	F	F	F	E	F	D	F	D	B	F	C	C
Approach Vol, veh/h		210			1096			2319			2551	
Approach Delay, s/veh		105.6			65.6			48.8			43.0	
Approach LOS		F			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	45.6	81.9	39.1	13.5	16.5	111.0	16.0	36.5
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	43.0	75.0	30.0	16.0	11.0	107.0	13.0	33.0
Max Q Clear Time (g_c+I1), s	40.8	66.3	25.9	9.3	7.1	40.4	12.0	32.3
Green Ext Time (p_c), s	0.8	7.5	1.0	0.2	3.3	23.3	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.3
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	476	369	300	106	381	100	217	172	129	65	110	347
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	506	393	319	113	405	106	224	177	133	80	136	428
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	592	1232	551	311	623	157	290	842	716	500	800	716
Arrive On Green	0.44	0.58	0.58	0.07	0.15	0.15	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1774	3539	1583	1774	4049	1023	843	1863	1583	1065	1770	1583
Grp Volume(v), veh/h	506	393	319	113	337	174	224	177	133	80	136	428
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1682	843	1863	1583	1065	1770	1583
Q Serve(g_s), s	21.1	5.1	11.4	4.8	8.4	8.8	22.4	5.2	4.5	4.4	4.1	18.3
Cycle Q Clear(g_c), s	21.1	5.1	11.4	4.8	8.4	8.8	40.7	5.2	4.5	9.6	4.1	18.3
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	592	1232	551	311	522	259	290	842	716	500	800	716
V/C Ratio(X)	0.85	0.32	0.58	0.36	0.65	0.67	0.77	0.21	0.19	0.16	0.17	0.60
Avail Cap(c_a), veh/h	622	1376	616	311	603	299	290	842	716	500	800	716
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.55	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	13.4	14.7	29.2	35.8	35.9	34.5	14.9	14.8	17.8	14.6	18.5
Incr Delay (d2), s/veh	6.3	0.1	0.6	0.7	1.9	4.8	17.9	0.6	0.6	0.7	0.5	3.7
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	11.0	2.5	5.0	2.4	4.1	4.4	7.0	2.8	2.1	1.4	2.1	8.7
LnGrp Delay(d),s/veh	22.5	13.4	15.3	29.9	37.7	40.7	52.4	15.5	15.3	18.5	15.1	22.2
LnGrp LOS	C	B	B	C	D	D	D	B	B	B	B	C
Approach Vol, veh/h		1218			624			534			644	
Approach Delay, s/veh		17.7			37.1			31.0			20.2	
Approach LOS		B			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.7	10.0	35.3		44.7	27.5	17.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	6.0	35.0		37.0	25.0	16.0
Max Q Clear Time (g_c+I1), s		42.7	6.8	13.4		20.3	23.1	10.8
Green Ext Time (p_c), s		0.0	0.0	7.5		6.7	0.4	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	208	285	73	64	276	222	120	97	75	200	100	185
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	219	300	77	67	291	234	136	110	85	225	112	208
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	400	766	194	341	700	313	631	1025	872	698	1025	872
Arrive On Green	0.12	0.27	0.27	0.04	0.20	0.20	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1774	2800	707	1774	3539	1583	1055	1863	1583	1183	1863	1583
Grp Volume(v), veh/h	219	188	189	67	291	234	136	110	85	225	112	208
Grp Sat Flow(s),veh/h/ln	1774	1770	1738	1774	1770	1583	1055	1863	1583	1183	1863	1583
Q Serve(g_s), s	8.4	7.8	8.0	2.7	6.5	12.5	6.4	2.5	2.3	10.1	2.6	6.1
Cycle Q Clear(g_c), s	8.4	7.8	8.0	2.7	6.5	12.5	9.0	2.5	2.3	12.6	2.6	6.1
Prop In Lane	1.00		0.41	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	400	484	476	341	700	313	631	1025	872	698	1025	872
V/C Ratio(X)	0.55	0.39	0.40	0.20	0.42	0.75	0.22	0.11	0.10	0.32	0.11	0.24
Avail Cap(c_a), veh/h	525	649	637	403	904	405	631	1025	872	698	1025	872
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	23.0	26.6	26.6	27.0	31.6	34.0	11.8	9.7	9.6	12.7	9.7	10.5
Incr Delay (d2), s/veh	1.2	0.5	0.5	0.3	0.4	5.5	0.8	0.2	0.2	1.2	0.2	0.6
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	4.2	3.9	3.9	1.3	3.2	5.9	2.0	1.3	1.1	3.5	1.4	2.8
LnGrp Delay(d),s/veh	24.2	27.1	27.2	27.3	32.0	39.5	12.6	9.9	9.8	13.9	9.9	11.1
LnGrp LOS	C	C	C	C	C	D	B	A	A	B	A	B
Approach Vol, veh/h		596			592			331			545	
Approach Delay, s/veh		26.0			34.4			11.0			12.0	
Approach LOS		C			C			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		53.5	7.8	28.6		53.5	14.7	21.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		38.0	7.0	33.0		38.0	17.0	23.0
Max Q Clear Time (g_c+I1), s		11.0	4.7	10.0		14.6	10.4	14.5
Green Ext Time (p_c), s		4.0	0.0	5.2		3.9	0.3	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	437	209	116	182	223	578	99	2208	86	652	2216	247
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	460	220	122	192	235	608	102	2276	89	679	2308	257
Adj No. of Lanes	2	1	0	1	1	2	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	202	112	188	238	882	120	2345	730	650	2711	296
Arrive On Green	0.13	0.18	0.18	0.08	0.13	0.13	0.07	0.46	0.46	0.19	0.58	0.58
Sat Flow, veh/h	3476	1138	631	1774	1863	2787	1774	5085	1583	3442	4655	508
Grp Volume(v), veh/h	460	0	342	192	235	608	102	2276	89	679	1668	897
Grp Sat Flow(s),veh/h/ln	1738	0	1770	1774	1863	1393	1774	1695	1583	1721	1695	1773
Q Serve(g_s), s	23.8	0.0	32.0	15.0	22.7	7.8	10.2	78.6	4.4	34.0	72.8	77.0
Cycle Q Clear(g_c), s	23.8	0.0	32.0	15.0	22.7	7.8	10.2	78.6	4.4	34.0	72.8	77.0
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	463	0	315	188	238	882	120	2345	730	650	1974	1032
V/C Ratio(X)	0.99	0.00	1.09	1.02	0.99	0.69	0.85	0.97	0.12	1.04	0.84	0.87
Avail Cap(c_a), veh/h	463	0	315	188	238	882	138	2345	730	650	1974	1032
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	0.00	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	77.9	0.0	74.0	66.0	78.4	29.7	83.0	47.3	16.1	73.0	30.9	31.8
Incr Delay (d2), s/veh	39.8	0.0	76.0	71.6	54.6	2.3	33.3	12.9	0.3	47.4	4.7	9.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.0	0.0	22.3	5.7	15.3	9.7	6.2	39.5	2.0	20.4	35.3	40.5
LnGrp Delay(d),s/veh	117.7	0.0	150.0	137.8	133.0	32.0	116.3	60.2	16.5	120.4	35.6	41.7
LnGrp LOS	F		F	F	F	C	F	E	B	F	D	D
Approach Vol, veh/h		802			1035			2467			3244	
Approach Delay, s/veh		131.5			74.5			60.9			55.0	
Approach LOS		F			E			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	38.0	87.0	19.0	36.0	16.2	108.8	28.0	27.0
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	34.0	83.0	15.0	32.0	14.0	103.0	24.0	23.0
Max Q Clear Time (g_c+I1), s	36.0	80.6	17.0	34.0	12.2	79.0	25.8	24.7
Green Ext Time (p_c), s	0.0	2.3	0.0	0.0	0.0	21.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.7
HCM 2010 LOS	E

Appendix F
Build Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	45	32	106	629	38	26	115	1773	343	20	1284	32
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	35	116	691	42	29	126	1948	377	22	1411	35
Adj No. of Lanes	2	1	1	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	156	133	761	412	350	165	2856	1159	169	2856	71
Arrive On Green	0.08	0.08	0.08	0.22	0.22	0.22	0.05	0.51	0.51	0.10	0.56	0.56
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	3548	5588	1583	1774	5104	127
Grp Volume(v), veh/h	49	35	116	691	42	29	126	1948	377	22	937	509
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1863	1583	1774	1695	1840
Q Serve(g_s), s	2.4	3.2	13.0	35.2	3.2	2.6	6.3	47.1	15.1	2.0	30.3	30.3
Cycle Q Clear(g_c), s	2.4	3.2	13.0	35.2	3.2	2.6	6.3	47.1	15.1	2.0	30.3	30.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	289	156	133	761	412	350	165	2856	1159	169	1897	1030
V/C Ratio(X)	0.17	0.22	0.87	0.91	0.10	0.08	0.76	0.68	0.33	0.13	0.49	0.49
Avail Cap(c_a), veh/h	306	166	141	956	517	440	217	2856	1159	169	1897	1030
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	0.68	0.68	0.68	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.6	77.0	81.5	68.3	55.9	55.6	84.8	33.0	8.5	74.6	24.1	24.1
Incr Delay (d2), s/veh	0.3	0.7	39.8	7.6	0.1	0.1	10.9	1.3	0.7	0.3	0.9	1.7
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	1.7	7.2	17.6	1.7	1.2	3.3	24.5	12.3	1.0	14.4	15.9
LnGrp Delay(d),s/veh	76.9	77.7	121.3	76.0	56.0	55.7	95.7	34.4	9.2	75.0	25.0	25.8
LnGrp LOS	E	E	F	E	E	E	F	C	A	E	C	C
Approach Vol, veh/h		200			762			2451			1468	
Approach Delay, s/veh		102.8			74.1			33.6			26.1	
Approach LOS		F			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.1	96.0		19.1	12.4	104.7		43.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	92.0		16.0	11.0	87.0		50.0
Max Q Clear Time (g_c+I1), s	4.0	49.1		15.0	8.3	32.3		37.2
Green Ext Time (p_c), s	1.2	26.8		0.1	0.1	15.2		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	380	0	4	620	31	3	2	1	15	0	10
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	54	404	0	4	681	34	5	3	2	34	0	23
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.63	0.63	0.63	0.44	0.44	0.44
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1126	504	346	993	50	832	568	379	843	1014	862
Arrive On Green	0.07	0.64	0.00	0.00	0.29	0.29	0.54	0.54	0.54	0.54	0.00	0.54
Sat Flow, veh/h	1774	3539	1583	1774	3431	171	1383	1044	696	1405	1863	1583
Grp Volume(v), veh/h	54	404	0	4	351	364	5	0	5	34	0	23
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1833	1383	0	1740	1405	1863	1583
Q Serve(g_s), s	1.9	4.8	0.0	0.1	15.8	15.8	0.1	0.0	0.1	1.0	0.0	0.6
Cycle Q Clear(g_c), s	1.9	4.8	0.0	0.1	15.8	15.8	0.1	0.0	0.1	1.1	0.0	0.6
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	222	1126	504	346	512	531	832	0	947	843	1014	862
V/C Ratio(X)	0.24	0.36	0.00	0.01	0.69	0.69	0.01	0.00	0.01	0.04	0.00	0.03
Avail Cap(c_a), veh/h	380	1888	844	496	885	916	832	0	947	843	1014	862
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.00	0.65	0.65	0.65	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	12.0	0.0	22.5	28.3	28.3	9.4	0.0	9.4	9.6	0.0	9.5
Incr Delay (d2), s/veh	0.5	0.2	0.0	0.0	1.1	1.0	0.0	0.0	0.0	0.1	0.0	0.1
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	2.3	0.0	0.1	7.9	8.1	0.1	0.0	0.1	0.4	0.0	0.3
LnGrp Delay(d),s/veh	22.3	12.2	0.0	22.5	29.4	29.4	9.4	0.0	9.4	9.7	0.0	9.5
LnGrp LOS	C	B		C	C	C	A		A	A		A
Approach Vol, veh/h		458			719			10			57	
Approach Delay, s/veh		13.4			29.4			9.4			9.7	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		53.0	4.4	32.6		53.0	7.0	30.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		22.0	8.0	48.0		22.0	11.0	45.0
Max Q Clear Time (g_c+I1), s		2.1	2.1	6.8		3.1	3.9	17.8
Green Ext Time (p_c), s		0.1	0.0	9.0		0.1	0.0	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	33	349	0	8	688	11	0	1	0	4	0	7
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	38	401	0	10	829	13	0	4	0	5	0	8
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.25	0.25	0.25	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1135	508	309	1082	17	0	999	0	833	0	849
Arrive On Green	0.01	0.11	0.00	0.02	0.61	0.61	0.00	0.54	0.00	0.54	0.00	0.54
Sat Flow, veh/h	1774	3539	1583	1774	3567	56	0	1863	0	1404	0	1583
Grp Volume(v), veh/h	38	401	0	10	411	431	0	4	0	5	0	8
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1853	0	1863	0	1404	0	1583
Q Serve(g_s), s	1.3	9.5	0.0	0.3	15.4	15.4	0.0	0.1	0.0	0.1	0.0	0.2
Cycle Q Clear(g_c), s	1.3	9.5	0.0	0.3	15.4	15.4	0.0	0.1	0.0	0.2	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.03	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	1135	508	309	537	562	0	999	0	833	0	849
V/C Ratio(X)	0.18	0.35	0.00	0.03	0.77	0.77	0.00	0.00	0.00	0.01	0.00	0.01
Avail Cap(c_a), veh/h	324	2006	897	429	983	1029	0	999	0	833	0	849
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.00	0.67	0.67	0.67	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.4	31.6	0.0	21.5	15.4	15.4	0.0	9.7	0.0	9.8	0.0	9.7
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.0	1.6	1.5	0.0	0.0	0.0	0.0	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	0.7	4.7	0.0	0.2	7.5	7.9	0.0	0.0	0.0	0.1	0.0	0.1
LnGrp Delay(d),s/veh	22.8	31.7	0.0	21.5	16.9	16.9	0.0	9.7	0.0	9.8	0.0	9.8
LnGrp LOS	C	C		C	B	B		A		A		A
Approach Vol, veh/h		439			852			4			13	
Approach Delay, s/veh		31.0			16.9			9.7			9.8	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.2	4.9	32.9		52.2	6.5	31.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	7.0	51.0		20.0	8.0	50.0
Max Q Clear Time (g_c+I1), s		2.1	2.3	11.5		2.2	3.3	17.4
Green Ext Time (p_c), s		0.0	0.0	10.4		0.0	0.0	9.9

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	309	0	0	697	27	0	0	0	8	0	7
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	32	396	0	0	830	32	0	0	0	15	0	13
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.78	0.78	0.78	0.84	0.84	0.84	0.25	0.25	0.25	0.55	0.55	0.55
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1343	0	355	1099	491	80	991	0	831	0	842
Arrive On Green	0.01	0.13	0.00	0.00	0.62	0.62	0.00	0.00	0.00	0.53	0.00	0.53
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1395	1863	0	1412	0	1583
Grp Volume(v), veh/h	32	396	0	0	830	32	0	0	0	15	0	13
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1583	1395	1863	0	1412	0	1583
Q Serve(g_s), s	1.1	9.1	0.0	0.0	15.1	0.7	0.0	0.0	0.0	0.5	0.0	0.3
Cycle Q Clear(g_c), s	1.1	9.1	0.0	0.0	15.1	0.7	0.0	0.0	0.0	0.5	0.0	0.3
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	1343	0	355	1099	491	80	991	0	831	0	842
V/C Ratio(X)	0.15	0.29	0.00	0.00	0.76	0.07	0.00	0.00	0.00	0.02	0.00	0.02
Avail Cap(c_a), veh/h	329	2163	0	432	2006	897	80	991	0	831	0	842
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.00	0.00	0.68	0.68	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	28.4	0.0	0.0	14.6	11.9	0.0	0.0	0.0	10.0	0.0	9.9
Incr Delay (d2), s/veh	0.3	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	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	0.5	4.5	0.0	0.0	7.3	0.3	0.0	0.0	0.0	0.2	0.0	0.2
LnGrp Delay(d),s/veh	21.3	28.6	0.0	0.0	15.4	11.9	0.0	0.0	0.0	10.0	0.0	10.0
LnGrp LOS	C	C			B	B				B		A
Approach Vol, veh/h		428			862			0			28	
Approach Delay, s/veh		28.0			15.2			0.0			10.0	
Approach LOS		C			B						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.9	0.0	38.1		51.9	6.2	31.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		19.0	4.0	55.0		19.0	8.0	51.0
Max Q Clear Time (g_c+I1), s		0.0	0.0	11.1		2.5	3.1	17.1
Green Ext Time (p_c), s		0.0	0.0	11.6		0.0	0.0	10.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	316	0	5	719	20	5	0	0	12	0	5
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	15	390	0	6	888	25	10	0	0	18	0	7
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.50	0.50	0.50	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	1178	0	339	1150	515	812	983	0	825	0	836
Arrive On Green	0.01	0.33	0.00	0.01	0.65	0.65	0.53	0.00	0.00	0.53	0.00	0.53
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1403	1863	0	1412	0	1583
Grp Volume(v), veh/h	15	390	0	6	888	25	10	0	0	18	0	7
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1583	1403	1863	0	1412	0	1583
Q Serve(g_s), s	0.5	7.4	0.0	0.2	15.9	0.5	0.3	0.0	0.0	0.5	0.0	0.2
Cycle Q Clear(g_c), s	0.5	7.4	0.0	0.2	15.9	0.5	0.9	0.0	0.0	0.5	0.0	0.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	1178	0	339	1150	515	812	983	0	825	0	836
V/C Ratio(X)	0.08	0.33	0.00	0.02	0.77	0.05	0.01	0.00	0.00	0.02	0.00	0.01
Avail Cap(c_a), veh/h	309	2045	0	446	2006	897	812	983	0	825	0	836
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	22.5	0.0	20.3	13.4	10.7	10.4	0.0	0.0	10.2	0.0	10.1
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	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	0.3	3.7	0.0	0.1	7.6	0.2	0.1	0.0	0.0	0.2	0.0	0.1
LnGrp Delay(d),s/veh	21.4	22.7	0.0	20.3	14.5	10.8	10.4	0.0	0.0	10.2	0.0	10.1
LnGrp LOS	C	C		C	B	B	B			B		B
Approach Vol, veh/h		405			919			10			25	
Approach Delay, s/veh		22.6			14.5			10.4			10.2	
Approach LOS		C			B			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		51.5	4.6	33.9		51.5	5.3	33.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	6.0	52.0		20.0	7.0	51.0
Max Q Clear Time (g_c+I1), s		2.9	2.2	9.4		2.5	2.5	17.9
Green Ext Time (p_c), s		0.1	0.0	12.2		0.1	0.0	11.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	20.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	188	128	11	51	514	74	69	8	83	42	4	169
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	86	86	86	77	77	77	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	227	154	13	59	598	86	90	10	108	52	5	211

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	684	0	0	167	0	0	1034	1416	84	1294	1379	342
Stage 1	-	-	-	-	-	-	614	614	-	759	759	-
Stage 2	-	-	-	-	-	-	420	802	-	535	620	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	905	-	-	1408	-	-	186	136	958	120	143	654
Stage 1	-	-	-	-	-	-	446	481	-	365	413	-
Stage 2	-	-	-	-	-	-	581	395	-	497	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	905	-	-	1408	-	-	95	98	958	77	103	654
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	98	-	77	103	-
Stage 1	-	-	-	-	-	-	334	360	-	273	396	-
Stage 2	-	-	-	-	-	-	372	378	-	321	358	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.9	0.6	95.8	37.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	95	958	905	-	-	1408	-	-	79	654
HCM Lane V/C Ratio	1.053	0.113	0.25	-	-	0.042	-	-	0.728	0.323
HCM Control Delay (s)	189.2	9.2	10.3	-	-	7.7	-	-	126	13.1
HCM Lane LOS	F	A	B	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	6.4	0.4	1	-	-	0.1	-	-	3.5	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	199	38	30	559	142	57	23	62	45	13	10
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	26	255	49	34	635	161	64	26	70	80	23	18
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.89	0.89	0.89	0.56	0.56	0.56
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	753	143	320	913	408	83	938	797	136	925	786
Arrive On Green	0.02	0.25	0.25	0.03	0.26	0.26	0.05	0.50	0.50	0.04	0.50	0.50
Sat Flow, veh/h	1774	2971	562	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	26	150	154	34	635	161	64	26	70	80	23	18
Grp Sat Flow(s),veh/h/ln	1774	1770	1764	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	1.0	6.2	6.4	1.3	14.6	7.6	3.2	0.6	2.1	2.1	0.6	0.5
Cycle Q Clear(g_c), s	1.0	6.2	6.4	1.3	14.6	7.6	3.2	0.6	2.1	2.1	0.6	0.5
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	449	447	320	913	408	83	938	797	136	925	786
V/C Ratio(X)	0.14	0.33	0.34	0.11	0.70	0.39	0.77	0.03	0.09	0.59	0.02	0.02
Avail Cap(c_a), veh/h	263	688	686	394	1376	616	256	938	797	344	925	786
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	25.2	27.4	27.5	24.1	30.2	27.6	42.4	11.2	11.6	42.5	11.6	11.5
Incr Delay (d2), s/veh	0.4	0.4	0.5	0.1	1.0	0.6	14.0	0.1	0.2	4.0	0.0	0.1
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	3.1	3.2	0.6	7.3	3.4	1.9	0.3	1.0	1.1	0.3	0.2
LnGrp Delay(d),s/veh	25.5	27.8	27.9	24.2	31.2	28.2	56.4	11.3	11.8	46.4	11.6	11.6
LnGrp LOS	C	C	C	C	C	C	E	B	B	D	B	B
Approach Vol, veh/h		330			830			160			121	
Approach Delay, s/veh		27.7			30.3			29.6			34.6	
Approach LOS		C			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	7.6	49.3	6.3	26.8	8.2	48.7	5.9	27.2
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	24.0	6.0	35.0	13.0	20.0	6.0	35.0
Max Q Clear Time (g_c+I1), s	4.1	4.1	3.3	8.4	5.2	2.6	3.0	16.6
Green Ext Time (p_c), s	0.1	0.5	0.0	7.6	0.1	0.4	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	263	91	620	978	6	95	11	184	12	25	26
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	296	102	646	1019	6	120	14	233	14	29	31
Adj No. of Lanes	1	2	1	2	2	1	1	1	2	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.96	0.96	0.96	0.79	0.79	0.79	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	430	192	887	1302	582	707	908	2077	625	402	430
Arrive On Green	0.01	0.12	0.12	0.26	0.37	0.37	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1337	1863	2787	1128	825	882
Grp Volume(v), veh/h	12	296	102	646	1019	6	120	14	233	14	0	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1337	1863	1393	1128	0	1707
Q Serve(g_s), s	0.6	7.2	5.4	15.4	23.0	0.2	4.7	0.3	0.0	0.6	0.0	1.7
Cycle Q Clear(g_c), s	0.6	7.2	5.4	15.4	23.0	0.2	6.4	0.3	0.0	0.9	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	20	430	192	887	1302	582	707	908	2077	625	0	832
V/C Ratio(X)	0.59	0.69	0.53	0.73	0.78	0.01	0.17	0.02	0.11	0.02	0.00	0.07
Avail Cap(c_a), veh/h	118	826	369	1300	1927	862	707	908	2077	625	0	832
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	0.00	1.00
Uniform Delay (d), s/veh	44.3	37.9	37.1	30.5	25.3	18.1	14.0	11.9	3.2	12.2	0.0	12.3
Incr Delay (d2), s/veh	24.0	2.0	2.3	1.2	1.3	0.0	0.5	0.0	0.1	0.1	0.0	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	0.4	3.7	2.5	7.5	11.4	0.1	1.8	0.2	0.8	0.2	0.0	0.8
LnGrp Delay(d),s/veh	68.2	39.9	39.4	31.7	26.5	18.1	14.5	11.9	3.3	12.2	0.0	12.4
LnGrp LOS	E	D	D	C	C	B	B	B	A	B		B
Approach Vol, veh/h		410			1671			367			74	
Approach Delay, s/veh		40.6			28.5			7.3			12.4	
Approach LOS		D			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		47.9	27.2	14.9		47.9	5.0	37.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	34.0	21.0		23.0	6.0	49.0
Max Q Clear Time (g_c+I1), s		8.4	17.4	9.2		3.7	2.6	25.0
Green Ext Time (p_c), s		1.5	2.3	1.7		1.7	0.9	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	3	2	38	5	111	9	1686	52	203	1302	18
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	8	4	3	51	0	153	10	1833	57	207	1329	18
Adj No. of Lanes	1	1	1	2	0	2	1	3	1	2	3	0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.92	0.92	0.92	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	41	35	138	0	403	237	3950	1230	252	3706	50
Arrive On Green	0.01	0.02	0.02	0.04	0.00	0.05	0.13	0.78	0.78	0.07	0.72	0.72
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	5085	1583	3442	5171	70
Grp Volume(v), veh/h	8	4	3	51	0	153	10	1833	57	207	871	476
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1583	1721	1695	1850
Q Serve(g_s), s	0.8	0.4	0.3	2.5	0.0	7.3	0.9	22.7	0.9	10.7	17.6	17.6
Cycle Q Clear(g_c), s	0.8	0.4	0.3	2.5	0.0	7.3	0.9	22.7	0.9	10.7	17.6	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	13	41	35	138	0	403	237	3950	1230	252	2430	1326
V/C Ratio(X)	0.63	0.10	0.09	0.37	0.00	0.38	0.04	0.46	0.05	0.82	0.36	0.36
Avail Cap(c_a), veh/h	59	228	194	138	0	619	237	3950	1230	478	2430	1326
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	0.97	0.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	89.1	86.2	86.2	84.4	0.0	60.4	68.0	7.0	1.8	82.2	9.7	9.7
Incr Delay (d2), s/veh	41.2	1.0	1.0	1.6	0.0	0.6	0.1	0.4	0.1	6.5	0.4	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	0.5	0.2	0.2	1.3	0.0	3.2	0.4	10.7	0.4	5.3	8.4	9.3
LnGrp Delay(d),s/veh	130.3	87.2	87.2	85.9	0.0	61.0	68.1	7.4	1.9	88.7	10.1	10.5
LnGrp LOS	F	F	F	F		E	E	A	A	F	B	B
Approach Vol, veh/h		15			204			1900			1554	
Approach Delay, s/veh		110.2			67.2			7.6			20.7	
Approach LOS		F			E			A			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	17.2	143.8	11.0	8.0	28.0	133.0	5.3	13.7
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	25.0	111.0	6.0	22.0	7.0	129.0	6.0	22.0
Max Q Clear Time (g_c+I1), s	12.7	24.7	4.5	2.4	2.9	19.6	2.8	9.3
Green Ext Time (p_c), s	0.5	28.6	0.0	0.0	0.0	13.9	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	64	198	27	27	142	11	15	2	9	6	8	36
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	90	279	38	34	178	14	36	5	21	7	10	43
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.71	0.71	0.71	0.80	0.80	0.80	0.42	0.42	0.42	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	482	216	187	484	37	1018	1313	1116	1051	1248	1116
Arrive On Green	0.02	0.04	0.04	0.03	0.10	0.10	0.71	0.71	0.71	0.71	0.71	0.71
Sat Flow, veh/h	1774	3539	1583	1774	4816	372	1346	1863	1583	1379	1770	1583
Grp Volume(v), veh/h	90	279	38	34	124	68	36	5	21	7	10	43
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1797	1346	1863	1583	1379	1770	1583
Q Serve(g_s), s	4.0	7.0	2.1	1.5	3.1	3.2	0.7	0.1	0.4	0.1	0.2	0.7
Cycle Q Clear(g_c), s	4.0	7.0	2.1	1.5	3.1	3.2	1.5	0.1	0.4	0.2	0.2	0.7
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	482	216	187	340	180	1018	1313	1116	1051	1248	1116
V/C Ratio(X)	0.34	0.58	0.18	0.18	0.37	0.38	0.04	0.00	0.02	0.01	0.01	0.04
Avail Cap(c_a), veh/h	552	1416	633	398	1092	579	1018	1313	1116	1051	1248	1116
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	40.5	38.1	35.1	37.8	37.8	4.2	3.9	4.0	4.0	3.9	4.0
Incr Delay (d2), s/veh	0.6	0.9	0.3	0.5	0.7	1.3	0.1	0.0	0.0	0.0	0.0	0.1
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	2.0	3.5	0.9	0.8	1.5	1.6	0.3	0.0	0.2	0.1	0.1	0.3
LnGrp Delay(d),s/veh	34.4	41.4	38.4	35.6	38.5	39.1	4.3	3.9	4.0	4.0	3.9	4.1
LnGrp LOS	C	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		407			226			62			60	
Approach Delay, s/veh		39.6			38.2			4.2			4.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		67.5	6.3	16.3		67.5	9.5	13.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		29.0	13.0	36.0		29.0	20.0	29.0
Max Q Clear Time (g_c+I1), s		3.5	3.5	9.0		2.7	6.0	5.2
Green Ext Time (p_c), s		0.5	0.0	3.3		0.5	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	21	155	16	24	157	39	5	1	7	10	1	14
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	221	23	30	196	49	9	2	12	11	1	16
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.70	0.70	0.70	0.80	0.80	0.80	0.58	0.58	0.58	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	392	40	185	428	192	1084	1345	1144	1086	1345	1144
Arrive On Green	0.02	0.12	0.12	0.02	0.12	0.12	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1774	3240	334	1774	3539	1583	1390	1863	1583	1394	1863	1583
Grp Volume(v), veh/h	30	120	124	30	196	49	9	2	12	11	1	16
Grp Sat Flow(s),veh/h/ln	1774	1770	1804	1774	1770	1583	1390	1863	1583	1394	1863	1583
Q Serve(g_s), s	1.3	5.7	5.9	1.3	4.6	2.5	0.2	0.0	0.2	0.2	0.0	0.3
Cycle Q Clear(g_c), s	1.3	5.7	5.9	1.3	4.6	2.5	0.2	0.0	0.2	0.2	0.0	0.3
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	214	218	185	428	192	1084	1345	1144	1086	1345	1144
V/C Ratio(X)	0.15	0.56	0.57	0.16	0.46	0.26	0.01	0.00	0.01	0.01	0.00	0.01
Avail Cap(c_a), veh/h	474	767	782	459	1534	686	1084	1345	1144	1086	1345	1144
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	33.6	37.3	37.3	33.7	36.8	35.9	3.5	3.5	3.5	3.5	3.5	3.5
Incr Delay (d2), s/veh	0.3	2.3	2.3	0.4	0.8	0.7	0.0	0.0	0.0	0.0	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	0.7	2.9	3.0	0.7	2.3	1.1	0.1	0.0	0.1	0.1	0.0	0.1
LnGrp Delay(d),s/veh	34.0	39.6	39.7	34.1	37.6	36.6	3.5	3.5	3.5	3.5	3.5	3.5
LnGrp LOS	C	D	D	C	D	D	A	A	A	A	A	A
Approach Vol, veh/h		274			275			23			28	
Approach Delay, s/veh		39.0			37.0			3.5			3.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		69.0	6.1	14.9		69.0	6.1	14.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	16.0	39.0		23.0	16.0	39.0
Max Q Clear Time (g_c+I1), s		2.2	3.3	7.9		2.3	3.3	6.6
Green Ext Time (p_c), s		0.1	0.0	3.0		0.1	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	152	25	28	105	77	1061	53	1723	24	303	1409	83
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	1881	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	167	27	31	124	91	1248	59	1914	27	316	1468	86
Adj No. of Lanes	2	1	1	1	1	2	1	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	679	577	474	642	1239	118	2119	660	344	2288	712
Arrive On Green	0.05	0.36	0.36	0.03	0.34	0.34	0.07	0.42	0.42	0.10	0.45	0.45
Sat Flow, veh/h	3476	1881	1599	1774	1863	2787	1774	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	167	27	31	124	91	1248	59	1914	27	316	1468	86
Grp Sat Flow(s),veh/h/ln	1738	1881	1599	1774	1863	1393	1774	1695	1583	1721	1695	1583
Q Serve(g_s), s	8.6	1.7	1.9	6.0	6.1	62.0	5.8	63.4	1.8	16.4	40.2	5.7
Cycle Q Clear(g_c), s	8.6	1.7	1.9	6.0	6.1	62.0	5.8	63.4	1.8	16.4	40.2	5.7
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	174	679	577	474	642	1239	118	2119	660	344	2288	712
V/C Ratio(X)	0.96	0.04	0.05	0.26	0.14	1.01	0.50	0.90	0.04	0.92	0.64	0.12
Avail Cap(c_a), veh/h	174	679	577	474	642	1239	118	2119	660	344	2288	712
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	85.3	37.3	25.6	44.1	40.7	32.2	81.1	49.1	31.2	80.3	38.3	28.8
Incr Delay (d2), s/veh	56.7	0.0	0.0	0.3	0.1	27.5	3.2	6.9	0.1	28.7	1.4	0.3
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	5.5	0.9	0.8	1.7	3.2	32.9	2.9	30.9	0.8	9.2	19.1	2.6
LnGrp Delay(d),s/veh	142.0	37.3	25.6	44.4	40.8	59.7	84.3	56.0	31.3	109.0	39.7	29.1
LnGrp LOS	F	D	C	D	D	F	F	E	C	F	D	C
Approach Vol, veh/h		225			1463			2000			1870	
Approach Delay, s/veh		113.4			57.2			56.5			50.9	
Approach LOS		F			E			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	22.0	79.0	10.0	69.0	16.0	85.0	13.0	66.0
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	18.0	75.0	6.0	65.0	12.0	81.0	9.0	62.0
Max Q Clear Time (g_c+I1), s	18.4	65.4	8.0	3.9	7.8	42.2	10.6	64.0
Green Ext Time (p_c), s	0.0	7.9	0.0	0.9	3.7	15.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.1
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	54	118	69	129	90	40
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	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	88	88	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	169	78	147	106	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	246	0	391	123
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1317	-	585	905
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	786	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1317	-	550	905
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	739	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	550	905	-	-	1317	-
HCM Lane V/C Ratio	0.193	0.052	-	-	0.06	-
HCM Control Delay (s)	13.1	9.2	-	-	7.9	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	327	710	12	0	50
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	86	86	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	394	826	14	0	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	826	0	-	0	1023	413
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	800	-	-	-	232	588
Stage 1	-	-	-	-	390	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	800	-	-	-	232	588
Mov Cap-2 Maneuver	-	-	-	-	232	-
Stage 1	-	-	-	-	390	-
Stage 2	-	-	-	-	817	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	588
HCM Lane V/C Ratio	-	-	-	-	0.113
HCM Control Delay (s)	0	-	-	-	11.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	259	623	15	0	47
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	86	86	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	312	724	17	0	63

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	724	0	-	0	880	362
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	874	-	-	-	287	635
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	856	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	874	-	-	-	287	635
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	856	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	874	-	-	-	635
HCM Lane V/C Ratio	-	-	-	-	0.099
HCM Control Delay (s)	0	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.4

Movement	NBL	NBR	SET	SER	NWL	NWT
Vol, veh/h	0	9	85	16	0	196
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	70	70	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	121	23	0	223

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	232	61	0	0	121	0
Stage 1	121	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	736	991	-	-	1464	-
Stage 1	891	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	736	991	-	-	1464	-
Mov Cap-2 Maneuver	736	-	-	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	991	1464	-	-	-
HCM Lane V/C Ratio	0.018	-	-	-	-
HCM Control Delay (s)	8.7	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	207	303	691	157	64	558	1976	1027	48	1915	140
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	195	238	348	743	169	69	581	2490	782	50	1995	146
Adj No. of Lanes	2	1	1	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	421	228	194	746	404	343	591	3011	1196	59	1962	143
Arrive On Green	0.12	0.12	0.12	0.29	0.29	0.29	0.17	0.54	0.54	0.03	0.41	0.41
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	3548	5588	1583	1774	4838	352
Grp Volume(v), veh/h	195	238	348	743	169	69	581	2490	782	50	1395	746
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1863	1583	1774	1695	1801
Q Serve(g_s), s	9.5	22.0	22.0	38.8	13.2	5.9	29.4	66.7	42.9	5.0	73.0	73.0
Cycle Q Clear(g_c), s	9.5	22.0	22.0	38.8	13.2	5.9	29.4	66.7	42.9	5.0	73.0	73.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	421	228	194	746	404	343	591	3011	1196	59	1375	730
V/C Ratio(X)	0.46	1.05	1.80	1.00	0.42	0.20	0.98	0.83	0.65	0.85	1.01	1.02
Avail Cap(c_a), veh/h	421	228	194	746	404	343	591	3011	1196	59	1375	730
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.5	79.0	79.0	64.0	54.9	52.3	74.7	34.5	10.6	86.5	53.5	53.5
Incr Delay (d2), s/veh	0.8	72.0	379.1	27.4	0.5	0.2	32.5	2.8	2.8	65.2	27.9	39.0
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	4.6	15.9	30.0	21.3	6.9	2.6	17.1	34.9	36.3	3.6	39.5	44.2
LnGrp Delay(d),s/veh	74.3	151.0	458.1	91.4	55.4	52.5	107.2	37.3	13.4	151.7	81.4	92.5
LnGrp LOS	E	F	F	F	E	D	F	D	B	F	F	F
Approach Vol, veh/h		781			981			3853			2191	
Approach Delay, s/veh		268.7			82.4			43.0			86.8	
Approach LOS		F			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	101.0		26.0	34.0	77.0		43.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	97.0		22.0	30.0	73.0		39.0
Max Q Clear Time (g_c+I1), s	7.0	68.7		24.0	31.4	75.0		40.8
Green Ext Time (p_c), s	0.0	25.6		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	82.8
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	224	1058	6	13	720	58	34	2	9	101	17	125
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	252	1189	7	14	791	64	50	3	13	117	20	145
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.89	0.89	0.89	0.91	0.91	0.91	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	1685	754	202	1263	102	530	115	499	596	703	597
Arrive On Green	0.11	0.48	0.48	0.00	0.13	0.13	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1774	3539	1583	1774	3317	268	1216	305	1324	1392	1863	1583
Grp Volume(v), veh/h	252	1189	7	14	422	433	50	0	16	117	20	145
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1815	1216	0	1629	1392	1863	1583
Q Serve(g_s), s	7.3	23.8	0.2	0.4	20.4	20.4	2.4	0.0	0.6	5.2	0.6	5.6
Cycle Q Clear(g_c), s	7.3	23.8	0.2	0.4	20.4	20.4	3.0	0.0	0.6	5.8	0.6	5.6
Prop In Lane	1.00		1.00	1.00		0.15	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	372	1685	754	202	674	691	530	0	615	596	703	597
V/C Ratio(X)	0.68	0.71	0.01	0.07	0.63	0.63	0.09	0.00	0.03	0.20	0.03	0.24
Avail Cap(c_a), veh/h	554	2045	915	257	728	746	530	0	615	596	703	597
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.57	0.82	0.82	0.82	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	18.6	12.4	18.2	33.3	33.3	18.6	0.0	17.6	19.4	17.6	19.2
Incr Delay (d2), s/veh	1.2	0.5	0.0	0.1	1.2	1.2	0.4	0.0	0.1	0.7	0.1	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	3.6	11.7	0.1	0.2	10.3	10.5	0.9	0.0	0.3	2.1	0.3	2.6
LnGrp Delay(d),s/veh	18.3	19.1	12.4	18.3	34.5	34.5	18.9	0.0	17.7	20.2	17.7	20.2
LnGrp LOS	B	B	B	B	C	C	B		B	C	B	C
Approach Vol, veh/h		1448			869			66			282	
Approach Delay, s/veh		18.9			34.2			18.6			20.0	
Approach LOS		B			C			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		38.0	5.2	46.9		38.0	13.8	38.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		22.0	4.0	52.0		22.0	19.0	37.0
Max Q Clear Time (g_c+I1), s		5.0	2.4	25.8		7.8	9.3	22.4
Green Ext Time (p_c), s		1.1	0.0	17.0		1.0	0.5	11.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	105	1100	6	16	722	28	9	0	16	56	1	54
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	111	1158	6	17	760	29	11	0	20	67	1	65
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.79	0.79	0.79	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	1575	704	207	1411	54	247	24	394	640	9	643
Arrive On Green	0.07	0.59	0.59	0.01	0.27	0.27	0.41	0.00	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1774	3539	1583	1774	3476	133	474	59	969	1380	22	1583
Grp Volume(v), veh/h	111	1158	6	17	387	402	31	0	0	68	0	65
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1839	1502	0	0	1402	0	1583
Q Serve(g_s), s	3.2	21.3	0.1	0.5	16.8	16.8	0.0	0.0	0.0	1.4	0.0	2.3
Cycle Q Clear(g_c), s	3.2	21.3	0.1	0.5	16.8	16.8	1.0	0.0	0.0	2.5	0.0	2.3
Prop In Lane	1.00		1.00	1.00		0.07	0.35		0.65	0.99		1.00
Lane Grp Cap(c), veh/h	326	1575	704	207	718	747	665	0	0	649	0	643
V/C Ratio(X)	0.34	0.74	0.01	0.08	0.54	0.54	0.05	0.00	0.00	0.10	0.00	0.10
Avail Cap(c_a), veh/h	388	2006	897	279	944	981	665	0	0	649	0	643
HCM Platoon Ratio	1.33	1.33	1.33	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	0.85	0.85	0.85	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	14.5	10.2	17.1	25.6	25.6	16.2	0.0	0.0	16.5	0.0	16.5
Incr Delay (d2), s/veh	0.5	0.8	0.0	0.1	0.5	0.5	0.1	0.0	0.0	0.3	0.0	0.3
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	1.6	10.4	0.1	0.3	8.3	8.7	0.5	0.0	0.0	1.1	0.0	1.1
LnGrp Delay(d),s/veh	15.5	15.3	10.2	17.3	26.1	26.1	16.3	0.0	0.0	16.9	0.0	16.8
LnGrp LOS	B	B	B	B	C	C	B			B		B
Approach Vol, veh/h		1275			806			31			133	
Approach Delay, s/veh		15.3			25.9			16.3			16.9	
Approach LOS		B			C			B			B	

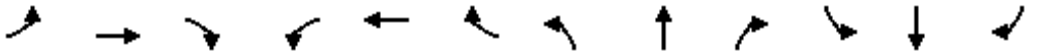
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		40.6	5.4	44.0		40.6	8.9	40.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		22.0	5.0	51.0		22.0	8.0	48.0
Max Q Clear Time (g_c+I1), s		3.0	2.5	23.3		4.5	5.2	18.8
Green Ext Time (p_c), s		0.6	0.0	16.8		0.6	0.1	17.3

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1029	3	8	672	67	3	1	0	75	2	92
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	74	1095	3	9	730	73	6	2	0	95	3	116
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.50	0.50	0.50	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	1403	4	206	1259	563	626	876	0	725	22	744
Arrive On Green	0.08	0.78	0.78	0.02	0.71	0.71	0.47	0.47	0.00	0.47	0.47	0.47
Sat Flow, veh/h	1774	3621	10	1774	3539	1583	1268	1863	0	1374	46	1583
Grp Volume(v), veh/h	74	535	563	9	730	73	6	2	0	98	0	116
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1583	1268	1863	0	1420	0	1583
Q Serve(g_s), s	2.3	15.5	15.5	0.3	9.1	1.3	0.2	0.1	0.0	3.5	0.0	3.8
Cycle Q Clear(g_c), s	2.3	15.5	15.5	0.3	9.1	1.3	3.8	0.1	0.0	3.5	0.0	3.8
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.00	0.97		1.00
Lane Grp Cap(c), veh/h	324	686	721	206	1259	563	626	876	0	747	0	744
V/C Ratio(X)	0.23	0.78	0.78	0.04	0.58	0.13	0.01	0.00	0.00	0.13	0.00	0.16
Avail Cap(c_a), veh/h	390	1003	1055	308	1966	880	626	876	0	747	0	744
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.62	0.91	0.91	0.91	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.4	7.9	7.9	19.0	9.7	8.6	14.6	12.6	0.0	13.6	0.0	13.6
Incr Delay (d2), s/veh	0.2	1.5	1.5	0.1	0.4	0.1	0.0	0.0	0.0	0.4	0.0	0.4
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	7.4	7.8	0.1	4.3	0.6	0.1	0.0	0.0	1.5	0.0	1.7
LnGrp Delay(d),s/veh	16.7	9.5	9.4	19.1	10.1	8.7	14.7	12.7	0.0	13.9	0.0	14.1
LnGrp LOS	B	A	A	B	B	A	B	B		B		B
Approach Vol, veh/h		1172			812			8			214	
Approach Delay, s/veh		9.9			10.0			14.2			14.0	
Approach LOS		A			B			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		46.3	4.8	38.9		46.3	7.7	36.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	6.0	51.0		21.0	7.0	50.0
Max Q Clear Time (g_c+I1), s		5.8	2.3	17.5		5.8	4.3	11.1
Green Ext Time (p_c), s		0.8	0.0	17.4		0.8	0.0	18.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	32	1161	2	14	645	76	2	0	7	65	0	52
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	34	1235	2	16	750	88	3	0	10	73	0	58
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.86	0.86	0.86	0.67	0.67	0.67	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	1519	2	216	1445	646	613	0	686	681	0	686
Arrive On Green	0.05	0.84	0.84	0.03	0.82	0.82	0.43	0.00	0.43	0.43	0.00	0.43
Sat Flow, veh/h	1774	3625	6	1774	3539	1583	1340	0	1583	1387	0	1583
Grp Volume(v), veh/h	34	603	634	16	750	88	3	0	10	73	0	58
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1583	1340	0	1583	1387	0	1583
Q Serve(g_s), s	1.0	15.6	15.6	0.5	6.1	1.0	0.1	0.0	0.3	2.8	0.0	1.9
Cycle Q Clear(g_c), s	1.0	15.6	15.6	0.5	6.1	1.0	3.3	0.0	0.3	3.2	0.0	1.9
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	348	741	780	216	1445	646	613	0	686	681	0	686
V/C Ratio(X)	0.10	0.81	0.81	0.07	0.52	0.14	0.00	0.00	0.01	0.11	0.00	0.08
Avail Cap(c_a), veh/h	381	1042	1096	269	2084	932	613	0	686	681	0	686
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	5.5	5.5	16.1	5.4	5.0	16.3	0.0	14.6	15.5	0.0	15.0
Incr Delay (d2), s/veh	0.1	2.2	2.1	0.1	0.3	0.1	0.0	0.0	0.0	0.3	0.0	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	0.5	7.1	7.5	0.2	2.8	0.5	0.0	0.0	0.1	1.2	0.0	0.9
LnGrp Delay(d),s/veh	14.6	7.7	7.6	16.3	5.7	5.1	16.4	0.0	14.6	15.8	0.0	15.3
LnGrp LOS	B	A	A	B	A	A	B		B	B		B
Approach Vol, veh/h		1271			854			13			131	
Approach Delay, s/veh		7.8			5.9			15.0			15.5	
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		43.0	5.3	41.7		43.0	6.3	40.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	4.0	53.0		21.0	4.0	53.0
Max Q Clear Time (g_c+I1), s		5.3	2.5	17.6		5.2	3.0	8.1
Green Ext Time (p_c), s		0.5	0.0	20.1		0.5	0.0	22.8

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1478.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	313	835	68	84	383	125	55	17	47	150	16	297
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	91	91	91	81	81	81	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	326	870	71	92	421	137	68	21	58	167	18	330

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	558	0	0	941	0	0	1961	2300	470	1771	2267	279
Stage 1	-	-	-	-	-	-	1557	1557	-	674	674	-
Stage 2	-	-	-	-	-	-	404	743	-	1097	1593	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1009	-	-	724	-	-	~ 38	38	540	~ 53	40	718
Stage 1	-	-	-	-	-	-	118	172	-	410	452	-
Stage 2	-	-	-	-	-	-	594	420	-	227	165	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1009	-	-	724	-	-	~ 6	22	540	~ 5	24	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 6	22	-	~ 5	24	-
Stage 1	-	-	-	-	-	-	80	116	-	278	395	-
Stage 2	-	-	-	-	-	-	268	367	-	~ 112	112	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.6	1.5	$ 3812.2	$ 6313.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	7	540	1009	-	-	724	-	-	5	718
HCM Lane V/C Ratio	12.698	0.107	0.323	-	-	0.127	-	-	36.889	0.46
HCM Control Delay (s)	$ 6292.6	12.5	10.3	-	-	10.7	-	-	$ 17583.9	14.2
HCM Lane LOS	F	B	B	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	12.8	0.4	1.4	-	-	0.4	-	-	25.2	2.4

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	65	892	47	60	512	325	47	17	41	395	44	56
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	69	949	50	61	522	332	68	25	59	407	45	58
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.98	0.98	0.98	0.69	0.69	0.69	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	1157	61	196	1183	529	88	567	482	497	744	633
Arrive On Green	0.05	0.45	0.45	0.04	0.33	0.33	0.05	0.30	0.30	0.14	0.40	0.40
Sat Flow, veh/h	1774	3420	180	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	69	491	508	61	522	332	68	25	59	407	45	58
Grp Sat Flow(s),veh/h/ln	1774	1770	1831	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	2.3	21.8	21.8	2.0	10.4	15.9	3.4	0.9	2.4	10.3	1.3	2.1
Cycle Q Clear(g_c), s	2.3	21.8	21.8	2.0	10.4	15.9	3.4	0.9	2.4	10.3	1.3	2.1
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	598	619	196	1183	529	88	567	482	497	744	633
V/C Ratio(X)	0.24	0.82	0.82	0.31	0.44	0.63	0.78	0.04	0.12	0.82	0.06	0.09
Avail Cap(c_a), veh/h	300	649	671	252	1376	616	177	567	482	650	744	633
HCM Platoon Ratio	1.33	1.33	1.33	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	18.8	22.4	22.4	21.4	23.4	25.2	42.3	22.1	22.6	37.4	16.6	16.8
Incr Delay (d2), s/veh	0.4	7.8	7.5	0.9	0.3	1.6	13.5	0.1	0.5	6.3	0.2	0.3
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	1.1	11.7	12.1	1.0	5.1	7.1	2.0	0.5	1.1	5.4	0.7	1.0
LnGrp Delay(d),s/veh	19.2	30.1	29.9	22.3	23.7	26.8	55.8	22.2	23.1	43.7	16.8	17.1
LnGrp LOS	B	C	C	C	C	C	E	C	C	D	B	B
Approach Vol, veh/h		1068			915			152			510	
Approach Delay, s/veh		29.3			24.7			37.6			38.3	
Approach LOS		C			C			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	17.0	31.4	7.2	34.4	8.4	40.0	7.5	34.1
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	17.0	18.0	6.0	33.0	9.0	26.0	4.0	35.0
Max Q Clear Time (g_c+I1), s	12.3	4.4	4.0	23.8	5.4	4.1	4.3	17.9
Green Ext Time (p_c), s	0.7	0.6	0.0	6.7	0.0	0.7	0.0	10.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	1052	197	586	542	11	213	29	1050	15	22	21
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	7	1073	201	604	559	11	222	30	1094	21	30	29
Adj No. of Lanes	1	2	1	2	2	1	1	1	2	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	1223	547	737	1956	875	458	572	1452	227	267	259
Arrive On Green	0.01	0.35	0.35	0.21	0.55	0.55	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1338	1863	2787	499	872	843
Grp Volume(v), veh/h	7	1073	201	604	559	11	222	30	1094	21	0	59
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1338	1863	1393	499	0	1714
Q Serve(g_s), s	0.4	25.6	8.6	15.1	7.6	0.3	12.8	1.0	8.6	2.8	0.0	2.2
Cycle Q Clear(g_c), s	0.4	25.6	8.6	15.1	7.6	0.3	15.1	1.0	8.6	3.8	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	13	1223	547	737	1956	875	458	572	1452	227	0	526
V/C Ratio(X)	0.55	0.88	0.37	0.82	0.29	0.01	0.49	0.05	0.75	0.09	0.00	0.11
Avail Cap(c_a), veh/h	79	1298	581	803	1966	880	458	572	1452	227	0	526
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	0.00	1.00
Uniform Delay (d), s/veh	44.5	27.6	22.1	33.7	10.7	9.1	27.8	22.0	17.0	23.3	0.0	22.4
Incr Delay (d2), s/veh	32.7	6.8	0.4	6.3	0.1	0.0	3.6	0.2	3.7	0.8	0.0	0.4
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	0.3	13.7	3.8	7.8	3.7	0.1	5.2	0.6	3.8	0.4	0.0	1.1
LnGrp Delay(d),s/veh	77.2	34.5	22.5	40.0	10.8	9.1	31.4	22.1	20.7	24.1	0.0	22.8
LnGrp LOS	E	C	C	D	B	A	C	C	C	C		C
Approach Vol, veh/h		1281			1174			1346			80	
Approach Delay, s/veh		32.8			25.8			22.5			23.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		31.6	23.3	35.1		31.6	4.6	53.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	21.0	33.0		24.0	4.0	50.0
Max Q Clear Time (g_c+I1), s		17.1	17.1	27.6		5.8	2.4	9.6
Green Ext Time (p_c), s		3.7	2.2	3.5		6.6	0.0	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	31	20	258	34	358	38	1854	172	536	1901	53
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	33	21	277	0	410	39	1892	176	564	2001	56
Adj No. of Lanes	1	1	1	2	0	2	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.98	0.98	0.98	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	55	46	439	0	909	221	2940	915	619	3221	90
Arrive On Green	0.05	0.03	0.03	0.12	0.00	0.11	0.12	0.58	0.58	0.18	0.63	0.63
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	5085	1583	3442	5086	142
Grp Volume(v), veh/h	65	33	21	277	0	410	39	1892	176	564	1333	724
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1583	1721	1695	1838
Q Serve(g_s), s	6.5	3.2	2.3	13.4	0.0	16.1	3.5	45.0	5.7	28.9	42.8	42.9
Cycle Q Clear(g_c), s	6.5	3.2	2.3	13.4	0.0	16.1	3.5	45.0	5.7	28.9	42.8	42.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	82	55	46	439	0	909	221	2940	915	619	2147	1164
V/C Ratio(X)	0.80	0.60	0.45	0.63	0.00	0.45	0.18	0.64	0.19	0.91	0.62	0.62
Avail Cap(c_a), veh/h	128	207	176	439	0	1062	221	2940	915	746	2147	1164
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	0.84	0.00	0.84	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.0	86.3	85.9	74.9	0.0	37.8	70.5	25.5	6.5	72.4	19.9	20.0
Incr Delay (d2), s/veh	16.7	10.3	6.7	2.4	0.0	0.3	0.4	1.1	0.5	13.8	1.4	2.5
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	3.6	1.8	1.1	6.7	0.0	7.0	1.8	21.3	2.6	15.0	20.4	22.5
LnGrp Delay(d),s/veh	101.7	96.6	92.7	77.4	0.0	38.0	70.9	26.6	7.0	86.2	21.3	22.5
LnGrp LOS	F	F	F	E		D	E	C	A	F	C	C
Approach Vol, veh/h		119			687			2107			2621	
Approach Delay, s/veh		98.7			53.9			25.8			35.6	
Approach LOS		F			D			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	36.4	108.1	26.3	9.3	26.4	118.0	12.3	23.3
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	39.0	84.0	21.0	20.0	9.0	114.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	30.9	47.0	15.4	5.2	5.5	44.9	8.5	18.1
Green Ext Time (p_c), s	1.4	22.5	0.6	0.1	0.1	30.6	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

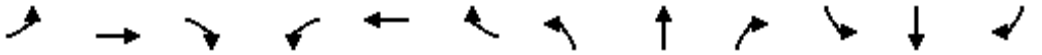
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	199	390	162	46	371	76	117	60	79	45	52	156
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	221	433	180	52	422	86	131	67	89	47	55	164
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	951	425	263	763	151	675	1051	894	752	999	894
Arrive On Green	0.04	0.09	0.09	0.03	0.18	0.18	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1774	3539	1583	1774	4259	845	1157	1863	1583	1226	1770	1583
Grp Volume(v), veh/h	221	433	180	52	333	175	131	67	89	47	55	164
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1714	1157	1863	1583	1226	1770	1583
Q Serve(g_s), s	8.6	10.5	9.7	2.1	8.1	8.4	5.6	1.5	2.3	1.6	1.3	4.5
Cycle Q Clear(g_c), s	8.6	10.5	9.7	2.1	8.1	8.4	10.1	1.5	2.3	3.1	1.3	4.5
Prop In Lane	1.00		1.00	1.00		0.49	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	951	425	263	607	307	675	1051	894	752	999	894
V/C Ratio(X)	0.59	0.46	0.42	0.20	0.55	0.57	0.19	0.06	0.10	0.06	0.06	0.18
Avail Cap(c_a), veh/h	610	1494	669	380	904	457	675	1051	894	752	999	894
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	34.8	34.4	28.8	33.6	33.8	12.0	8.9	9.0	9.6	8.8	9.5
Incr Delay (d2), s/veh	1.0	0.2	0.4	0.4	0.8	1.7	0.6	0.1	0.2	0.2	0.1	0.5
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	4.3	5.2	4.3	1.1	3.8	4.1	1.9	0.8	1.1	0.6	0.6	2.1
LnGrp Delay(d),s/veh	27.5	35.0	34.9	29.1	34.4	35.4	12.6	9.0	9.3	9.7	8.9	10.0
LnGrp LOS	C	C	C	C	C	D	B	A	A	A	A	A
Approach Vol, veh/h		834			560			287			266	
Approach Delay, s/veh		33.0			34.2			10.7			9.7	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		54.8	7.0	28.2		54.8	15.1	20.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	9.0	38.0		31.0	23.0	24.0
Max Q Clear Time (g_c+I1), s		12.1	4.1	12.5		6.5	10.6	10.4
Green Ext Time (p_c), s		2.6	0.0	7.6		2.8	0.5	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	89	401	23	40	375	82	41	20	72	125	26	56
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	105	472	27	48	452	99	49	24	86	142	30	64
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.84	0.84	0.84	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	827	47	243	746	334	840	1104	938	830	1104	938
Arrive On Green	0.06	0.24	0.24	0.03	0.21	0.21	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1774	3404	194	1774	3539	1583	1297	1863	1583	1278	1863	1583
Grp Volume(v), veh/h	105	245	254	48	452	99	49	24	86	142	30	64
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1583	1297	1863	1583	1278	1863	1583
Q Serve(g_s), s	4.1	10.9	11.0	1.9	10.4	4.7	1.5	0.5	2.1	4.6	0.6	1.5
Cycle Q Clear(g_c), s	4.1	10.9	11.0	1.9	10.4	4.7	2.1	0.5	2.1	5.1	0.6	1.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	430	444	243	746	334	840	1104	938	830	1104	938
V/C Ratio(X)	0.38	0.57	0.57	0.20	0.61	0.30	0.06	0.02	0.09	0.17	0.03	0.07
Avail Cap(c_a), veh/h	398	669	691	405	1298	581	840	1104	938	830	1104	938
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	25.3	29.9	29.9	27.0	32.1	29.9	8.0	7.6	7.9	8.6	7.6	7.8
Incr Delay (d2), s/veh	0.9	1.2	1.2	0.4	0.8	0.5	0.1	0.0	0.2	0.4	0.0	0.1
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	2.1	5.4	5.7	0.9	5.2	2.1	0.5	0.3	1.0	1.7	0.3	0.7
LnGrp Delay(d),s/veh	26.2	31.1	31.1	27.4	32.9	30.4	8.2	7.6	8.1	9.1	7.6	7.9
LnGrp LOS	C	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		604			599			159			236	
Approach Delay, s/veh		30.3			32.1			8.0			8.6	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.3	6.8	25.9		57.3	9.7	23.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		33.0	11.0	34.0		33.0	12.0	33.0
Max Q Clear Time (g_c+I1), s		4.1	3.9	13.0		7.1	6.1	12.4
Green Ext Time (p_c), s		1.4	0.0	6.6		1.4	0.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	291	159	66	130	149	486	94	2096	100	968	2306	125
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	1881	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	306	167	69	148	169	552	96	2139	102	1030	2453	133
Adj No. of Lanes	2	1	1	1	1	2	1	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.88	0.88	0.88	0.98	0.98	0.98	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	219	187	193	176	1099	115	2175	677	1032	3373	1050
Arrive On Green	0.09	0.12	0.12	0.07	0.09	0.09	0.06	0.43	0.43	0.30	0.66	0.66
Sat Flow, veh/h	3476	1881	1599	1774	1863	2787	1774	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	306	167	69	148	169	552	96	2139	102	1030	2453	133
Grp Sat Flow(s),veh/h/ln	1738	1881	1599	1774	1863	1393	1774	1695	1583	1721	1695	1583
Q Serve(g_s), s	15.8	15.5	7.2	12.0	16.3	4.9	9.6	74.8	5.7	53.8	56.5	5.6
Cycle Q Clear(g_c), s	15.8	15.5	7.2	12.0	16.3	4.9	9.6	74.8	5.7	53.8	56.5	5.6
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	309	219	187	193	176	1099	115	2175	677	1032	3373	1050
V/C Ratio(X)	0.99	0.76	0.37	0.77	0.96	0.50	0.84	0.98	0.15	1.00	0.73	0.13
Avail Cap(c_a), veh/h	309	219	187	193	176	1099	168	2175	677	1032	3373	1050
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	81.9	77.1	73.4	71.0	81.2	24.1	83.3	50.9	20.5	62.9	19.7	11.1
Incr Delay (d2), s/veh	48.5	14.4	1.2	16.7	56.2	0.4	20.9	15.7	0.5	27.4	1.4	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	9.7	8.9	3.2	2.3	11.1	7.7	5.4	38.2	2.6	29.5	26.8	2.5
LnGrp Delay(d),s/veh	130.4	91.5	74.6	87.7	137.3	24.5	104.2	66.6	20.9	90.3	21.1	11.4
LnGrp LOS	F	F	E	F	F	C	F	E	C	F	C	B
Approach Vol, veh/h		542			869			2337			3616	
Approach Delay, s/veh		111.3			57.2			66.2			40.5	
Approach LOS		F			E			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	58.0	81.0	16.0	25.0	15.6	123.4	20.0	21.0
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	54.0	77.0	12.0	21.0	17.0	114.0	16.0	17.0
Max Q Clear Time (g_c+I1), s	55.8	76.8	14.0	17.5	11.6	58.5	17.8	18.3
Green Ext Time (p_c), s	0.0	0.2	0.0	1.6	0.1	47.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.8
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	20.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	408	189	103	298	199	135
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	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	83	83	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	480	222	124	359	216	147

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	702	0	1019	351
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	428	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	891	-	233	645
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	625	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	891	-	~ 201	645
Mov Cap-2 Maneuver	-	-	-	-	~ 201	-
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	538	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	85.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	201	645	-	-	891	-
HCM Lane V/C Ratio	1.076	0.228	-	-	0.139	-
HCM Control Delay (s)	134.7	12.2	-	-	9.7	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	10	0.9	-	-	0.5	-

Notes

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

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1215	676	23	0	66
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	91	91	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1266	743	25	0	88

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	743	0	-	0	1376	371
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	633	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	860	-	-	-	136	626
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	491	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	860	-	-	-	136	626
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	491	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	860	-	-	-	626
HCM Lane V/C Ratio	-	-	-	-	0.141
HCM Control Delay (s)	0	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1034	565	27	0	56
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	91	91	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1077	621	30	0	75

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	621	0	-	0	1160	310
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	539	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	956	-	-	-	189	686
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	549	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	956	-	-	-	189	686
Mov Cap-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	549	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	956	-	-	-	686
HCM Lane V/C Ratio	-	-	-	-	0.109
HCM Control Delay (s)	0	-	-	-	10.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	NBL	NBR	SET	SER	NWL	NWT
Vol, veh/h	0	31	514	43	0	401
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	85	85	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	52	605	51	0	483

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	847	302	0	0	605	0
Stage 1	605	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	301	694	-	-	969	-
Stage 1	508	-	-	-	-	-
Stage 2	776	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	301	694	-	-	969	-
Mov Cap-2 Maneuver	301	-	-	-	-	-
Stage 1	508	-	-	-	-	-
Stage 2	776	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	694	969	-	-	-
HCM Lane V/C Ratio	0.074	-	-	-	-
HCM Control Delay (s)	10.6	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	469	521	1004	1068	351	81	1046	2800	996	123	2019	266
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	494	548	1057	1174	386	89	1078	2960	978	128	2103	277
Adj No. of Lanes	2	1	1	2	1	1	2	3	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	860	466	396	727	393	334	591	2266	976	79	1292	167
Arrive On Green	0.25	0.25	0.25	0.28	0.28	0.28	0.17	0.41	0.41	0.04	0.28	0.28
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	3548	5588	1583	1774	4558	590
Grp Volume(v), veh/h	494	548	1057	1174	386	89	1078	2960	978	128	1555	825
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1863	1583	1774	1695	1759
Q Serve(g_s), s	22.6	45.0	45.0	38.0	37.0	7.9	30.0	73.0	73.0	8.0	51.0	51.0
Cycle Q Clear(g_c), s	22.6	45.0	45.0	38.0	37.0	7.9	30.0	73.0	73.0	8.0	51.0	51.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	860	466	396	727	393	334	591	2266	976	79	961	498
V/C Ratio(X)	0.57	1.18	2.67	1.62	0.98	0.27	1.82	1.31	1.00	1.62	1.62	1.66
Avail Cap(c_a), veh/h	860	466	396	727	393	334	591	2266	976	79	961	498
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.1	67.5	67.5	64.7	64.4	53.9	75.0	53.5	27.2	86.0	64.5	64.5
Incr Delay (d2), s/veh	0.9	100.0	758.8	280.4	28.0	0.2	377.0	141.0	29.2	330.9	283.3	303.9
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	10.9	36.1	103.1	46.3	22.1	3.5	45.7	67.2	56.5	11.2	61.7	66.8
LnGrp Delay(d),s/veh	60.0	167.5	826.3	345.2	92.4	54.1	452.0	194.5	56.4	416.9	347.8	368.4
LnGrp LOS	E	F	F	F	F	D	F	F	F	F	F	F
Approach Vol, veh/h		2099			1649			5016			2508	
Approach Delay, s/veh		474.0			270.3			222.9			358.1	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	77.0		49.0	34.0	55.0		42.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	73.0		45.0	30.0	51.0		38.0
Max Q Clear Time (g_c+I1), s	10.0	75.0		47.0	32.0	53.0		40.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	306.7
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	386	1232	11	29	1089	108	39	10	21	156	15	317
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	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	398	1270	11	30	1111	110	51	13	28	175	17	356
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.98	0.98	0.98	0.76	0.76	0.76	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	428	1960	877	292	1292	128	364	153	329	449	539	458
Arrive On Green	0.36	1.00	1.00	0.01	0.13	0.13	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	1774	3254	322	1005	527	1135	1360	1863	1583
Grp Volume(v), veh/h	398	1270	11	30	604	617	51	0	41	175	17	356
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1806	1005	0	1662	1360	1863	1583
Q Serve(g_s), s	13.5	0.0	0.0	0.9	30.1	30.1	3.4	0.0	1.6	9.7	0.6	18.5
Cycle Q Clear(g_c), s	13.5	0.0	0.0	0.9	30.1	30.1	4.0	0.0	1.6	11.3	0.6	18.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	428	1960	877	292	703	717	364	0	481	449	539	458
V/C Ratio(X)	0.93	0.65	0.01	0.10	0.86	0.86	0.14	0.00	0.09	0.39	0.03	0.78
Avail Cap(c_a), veh/h	542	2124	950	330	708	722	364	0	481	449	539	458
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.53	0.53	0.53	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	0.0	0.0	15.6	36.6	36.7	24.4	0.0	23.3	27.4	22.9	29.3
Incr Delay (d2), s/veh	2.7	0.1	0.0	0.1	5.9	5.8	0.8	0.0	0.3	2.5	0.1	12.2
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	9.4	0.0	0.0	0.4	15.9	16.3	1.0	0.0	0.8	4.0	0.3	9.7
LnGrp Delay(d),s/veh	18.8	0.1	0.0	15.7	42.5	42.5	25.2	0.0	23.6	29.9	23.0	41.5
LnGrp LOS	B	A	A	B	D	D	C		C	C	C	D
Approach Vol, veh/h		1679			1251			92			548	
Approach Delay, s/veh		4.5			41.9			24.5			37.2	
Approach LOS		A			D			C			D	

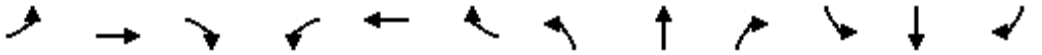
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.1	6.1	53.8		30.1	20.2	39.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	4.0	54.0		20.0	22.0	36.0
Max Q Clear Time (g_c+I1), s		6.0	2.9	2.0		20.5	15.5	32.1
Green Ext Time (p_c), s		2.1	0.0	33.5		0.0	0.7	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	304	1108	17	35	986	91	12	3	29	123	6	165
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	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	313	1142	18	39	1096	101	14	4	35	148	7	199
Adj No. of Lanes	1	2	1	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.90	0.90	0.90	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	1778	795	321	1302	120	98	48	187	365	16	533
Arrive On Green	0.27	1.00	1.00	0.04	0.53	0.53	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	3539	1583	1774	3277	302	141	144	554	852	46	1583
Grp Volume(v), veh/h	313	1142	18	39	591	606	53	0	0	155	0	199
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1809	839	0	0	898	0	1583
Q Serve(g_s), s	9.3	0.0	0.0	1.2	25.5	25.6	0.5	0.0	0.0	0.0	0.0	8.6
Cycle Q Clear(g_c), s	9.3	0.0	0.0	1.2	25.5	25.6	19.7	0.0	0.0	19.3	0.0	8.6
Prop In Lane	1.00		1.00	1.00		0.17	0.26		0.66	0.95		1.00
Lane Grp Cap(c), veh/h	368	1778	795	321	703	719	333	0	0	381	0	533
V/C Ratio(X)	0.85	0.64	0.02	0.12	0.84	0.84	0.16	0.00	0.00	0.41	0.00	0.37
Avail Cap(c_a), veh/h	527	2084	932	350	728	744	333	0	0	381	0	533
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.79	0.79	0.79	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	15.1	18.8	18.8	21.5	0.0	0.0	26.1	0.0	22.6
Incr Delay (d2), s/veh	7.2	0.4	0.0	0.1	6.9	6.8	1.0	0.0	0.0	3.2	0.0	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	5.1	0.1	0.0	0.6	13.7	14.0	1.0	0.0	0.0	3.7	0.0	4.0
LnGrp Delay(d),s/veh	22.5	0.4	0.0	15.2	25.7	25.7	22.6	0.0	0.0	29.3	0.0	24.6
LnGrp LOS	C	A	A	B	C	C	C			C		C
Approach Vol, veh/h		1473			1236			53			354	
Approach Delay, s/veh		5.1			25.4			22.6			26.7	
Approach LOS		A			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.3	6.5	49.2		34.3	15.9	39.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	4.0	53.0		21.0	20.0	37.0
Max Q Clear Time (g_c+I1), s		21.7	3.2	2.0		21.3	11.3	27.6
Green Ext Time (p_c), s		0.0	0.0	30.3		0.0	0.6	8.2

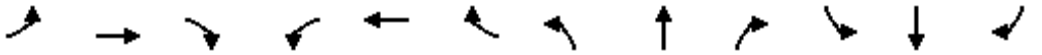
Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	163	1058	19	39	850	103	34	8	8	116	0	206
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	168	1091	20	39	859	104	43	10	10	140	0	248
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.99	0.99	0.99	0.79	0.79	0.79	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	409	1651	30	218	1482	663	414	321	321	589	0	593
Arrive On Green	0.02	0.15	0.15	0.06	0.84	0.84	0.37	0.37	0.37	0.37	0.00	0.37
Sat Flow, veh/h	1774	3556	65	1774	3539	1583	1127	856	856	1359	0	1583
Grp Volume(v), veh/h	168	543	568	39	859	104	43	0	20	140	0	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1851	1774	1770	1583	1127	0	1712	1359	0	1583
Q Serve(g_s), s	4.5	26.0	26.0	1.1	6.9	1.1	2.5	0.0	0.7	6.4	0.0	10.5
Cycle Q Clear(g_c), s	4.5	26.0	26.0	1.1	6.9	1.1	9.6	0.0	0.7	7.1	0.0	10.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	409	822	860	218	1482	663	414	0	641	589	0	593
V/C Ratio(X)	0.41	0.66	0.66	0.18	0.58	0.16	0.10	0.00	0.03	0.24	0.00	0.42
Avail Cap(c_a), veh/h	515	944	987	267	1612	721	414	0	641	589	0	593
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	31.4	31.4	16.5	4.8	4.3	23.2	0.0	17.8	20.0	0.0	20.9
Incr Delay (d2), s/veh	0.5	1.2	1.1	0.3	0.4	0.1	0.5	0.0	0.1	1.0	0.0	2.2
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	2.3	13.0	13.6	0.5	3.2	0.5	0.8	0.0	0.3	2.6	0.0	4.9
LnGrp Delay(d),s/veh	13.5	32.6	32.5	16.8	5.2	4.4	23.7	0.0	17.9	21.0	0.0	23.0
LnGrp LOS	B	C	C	B	A	A	C		B	C		C
Approach Vol, veh/h		1279			1002			63			388	
Approach Delay, s/veh		30.1			5.5			21.9			22.3	
Approach LOS		C			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		37.7	6.5	45.8		37.7	10.6	41.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	5.0	48.0		25.0	12.0	41.0
Max Q Clear Time (g_c+I1), s		11.6	3.1	28.0		12.5	6.5	8.9
Green Ext Time (p_c), s		1.6	0.0	13.8		1.6	0.2	18.8

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	87	1126	6	12	828	152	7	2	6	154	3	162
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	1863	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	95	1224	7	12	862	158	13	4	11	177	3	186
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.54	0.54	0.54	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	1623	9	191	1465	656	451	178	490	629	10	642
Arrive On Green	0.06	0.60	0.60	0.02	0.83	0.83	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1774	3608	21	1774	3539	1583	1189	440	1209	1357	25	1583
Grp Volume(v), veh/h	95	600	631	12	862	158	13	0	15	180	0	186
Grp Sat Flow(s),veh/h/ln	1774	1770	1859	1774	1770	1583	1189	0	1649	1382	0	1583
Q Serve(g_s), s	2.7	22.3	22.3	0.4	7.3	1.9	0.7	0.0	0.5	7.9	0.0	7.1
Cycle Q Clear(g_c), s	2.7	22.3	22.3	0.4	7.3	1.9	9.1	0.0	0.5	8.4	0.0	7.1
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.73	0.98		1.00
Lane Grp Cap(c), veh/h	347	796	836	191	1465	656	451	0	668	639	0	642
V/C Ratio(X)	0.27	0.75	0.75	0.06	0.59	0.24	0.03	0.00	0.02	0.28	0.00	0.29
Avail Cap(c_a), veh/h	381	924	971	250	1770	792	451	0	668	639	0	642
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.4	14.4	14.4	16.8	5.2	4.7	21.6	0.0	16.1	18.6	0.0	18.0
Incr Delay (d2), s/veh	0.3	2.0	1.9	0.1	0.4	0.2	0.1	0.0	0.1	1.1	0.0	1.1
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	1.3	11.2	11.8	0.2	3.4	0.8	0.2	0.0	0.2	3.2	0.0	3.3
LnGrp Delay(d),s/veh	13.7	16.5	16.4	17.0	5.5	4.9	21.7	0.0	16.1	19.7	0.0	19.2
LnGrp LOS	B	B	B	B	A	A	C		B	B		B
Approach Vol, veh/h		1326			1032			28			366	
Approach Delay, s/veh		16.2			5.6			18.7			19.4	
Approach LOS		B			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		40.5	5.0	44.5		40.5	8.3	41.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		27.0	4.0	47.0		27.0	6.0	45.0
Max Q Clear Time (g_c+I1), s		11.1	2.4	24.3		10.4	4.7	9.3
Green Ext Time (p_c), s		1.6	0.0	16.1		1.6	0.0	22.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	436	811	59	84	573	200	45	26	38	182	22	354
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	97	97	97	87	87	87	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	445	828	60	87	591	206	52	30	44	198	24	385

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	797	0	0	888	0	0	2228	2717	444	2186	2645	398
Stage 1	-	-	-	-	-	-	1747	1747	-	867	867	-
Stage 2	-	-	-	-	-	-	481	970	-	1319	1778	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	821	-	-	758	-	-	~ 24	~ 21	561	~ 25	~ 23	601
Stage 1	-	-	-	-	-	-	89	138	-	314	368	-
Stage 2	-	-	-	-	-	-	535	330	-	~ 166	134	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	821	-	-	758	-	-	-	~ 9	561	-	~ 9	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 9	-	-	~ 9	-
Stage 1	-	-	-	-	-	-	~ 41	63	-	~ 144	326	-
Stage 2	-	-	-	-	-	-	158	292	-	~ 37	61	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.8	1		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	561	821	-	-	758	-	-	-	601
HCM Lane V/C Ratio	-	0.078	0.542	-	-	0.114	-	-	-	0.64
HCM Control Delay (s)	-	12	14.4	-	-	10.4	-	-	-	21
HCM Lane LOS	-	B	B	-	-	B	-	-	-	C
HCM 95th %tile Q(veh)	-	0.3	3.3	-	-	0.4	-	-	-	4.6

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	191	785	36	27	763	457	34	22	36	561	28	78
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	203	835	38	29	812	486	53	34	56	591	29	82
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.64	0.64	0.64	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	1226	56	226	983	440	68	463	394	671	756	642
Arrive On Green	0.13	0.47	0.47	0.02	0.28	0.28	0.04	0.25	0.25	0.19	0.41	0.41
Sat Flow, veh/h	1774	3448	157	1774	3539	1583	1774	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	203	429	444	29	812	486	53	34	56	591	29	82
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1583	1774	1863	1583	1721	1863	1583
Q Serve(g_s), s	7.0	16.9	16.9	1.0	19.4	25.0	2.7	1.3	2.5	15.0	0.8	2.9
Cycle Q Clear(g_c), s	7.0	16.9	16.9	1.0	19.4	25.0	2.7	1.3	2.5	15.0	0.8	2.9
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	629	653	226	983	440	68	463	394	671	756	642
V/C Ratio(X)	0.71	0.68	0.68	0.13	0.83	1.11	0.78	0.07	0.14	0.88	0.04	0.13
Avail Cap(c_a), veh/h	323	629	653	265	983	440	118	463	394	727	756	642
HCM Platoon Ratio	1.33	1.33	1.33	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	21.1	19.8	19.8	22.9	30.5	32.5	42.9	25.9	26.3	35.2	16.2	16.8
Incr Delay (d2), s/veh	6.2	3.0	2.9	0.3	5.9	74.6	17.6	0.3	0.8	11.5	0.1	0.4
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	3.8	8.7	9.0	0.5	10.3	20.0	1.6	0.7	1.2	8.2	0.5	1.3
LnGrp Delay(d),s/veh	27.3	22.7	22.6	23.2	36.3	107.1	60.5	26.2	27.1	46.8	16.2	17.2
LnGrp LOS	C	C	C	C	D	F	E	C	C	D	B	B
Approach Vol, veh/h		1076			1327			143			702	
Approach Delay, s/veh		23.6			61.9			39.3			42.0	
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	21.5	26.4	6.1	36.0	7.4	40.5	13.1	29.0
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	19.0	19.0	4.0	32.0	6.0	32.0	11.0	25.0
Max Q Clear Time (g_c+I1), s	17.0	4.5	3.0	18.9	4.7	4.9	9.0	27.0
Green Ext Time (p_c), s	0.5	0.6	0.0	9.7	0.0	0.8	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	739	257	885	637	8	278	33	1136	11	35	3
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	10	786	273	962	692	9	302	36	1235	12	38	3
Adj No. of Lanes	1	2	1	2	2	1	1	1	2	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	879	393	1054	1928	862	483	581	1723	210	532	42
Arrive On Green	0.01	0.25	0.25	0.31	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3442	3539	1583	1360	1863	2787	434	1704	135
Grp Volume(v), veh/h	10	786	273	962	692	9	302	36	1235	12	0	41
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1583	1360	1863	1393	434	0	1839
Q Serve(g_s), s	0.5	19.3	14.1	24.2	10.0	0.2	18.1	1.2	0.0	1.8	0.0	1.4
Cycle Q Clear(g_c), s	0.5	19.3	14.1	24.2	10.0	0.2	19.5	1.2	0.0	3.0	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	17	879	393	1054	1928	862	483	581	1723	210	0	574
V/C Ratio(X)	0.57	0.89	0.69	0.91	0.36	0.01	0.62	0.06	0.72	0.06	0.00	0.07
Avail Cap(c_a), veh/h	79	904	405	1109	1928	862	483	581	1723	210	0	574
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	0.00	1.00
Uniform Delay (d), s/veh	44.4	32.7	30.7	30.1	11.6	9.4	28.6	21.7	11.8	22.8	0.0	21.8
Incr Delay (d2), s/veh	26.4	11.1	4.9	11.1	0.1	0.0	6.0	0.2	2.6	0.5	0.0	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	0.4	10.7	6.7	13.1	4.8	0.1	7.6	0.7	10.9	0.2	0.0	0.8
LnGrp Delay(d),s/veh	70.7	43.8	35.6	41.1	11.7	9.4	34.6	21.9	14.4	23.3	0.0	22.0
LnGrp LOS	E	D	D	D	B	A	C	C	B	C		C
Approach Vol, veh/h		1069			1663			1573			53	
Approach Delay, s/veh		42.0			28.7			18.4			22.3	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.1	31.6	26.4		32.1	4.9	53.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	29.0	23.0		26.0	4.0	48.0
Max Q Clear Time (g_c+I1), s		21.5	26.2	21.3		5.0	2.5	12.0
Green Ext Time (p_c), s		2.9	1.3	1.0		8.0	0.0	11.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	87	68	30	489	104	536	51	1946	298	940	1695	66
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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	100	78	34	526	0	651	52	1966	301	959	1730	67
Adj No. of Lanes	1	1	1	2	0	2	1	3	1	2	3	0
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.99	0.99	0.99	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	100	85	532	0	1331	171	2213	689	937	3070	119
Arrive On Green	0.06	0.05	0.05	0.25	0.00	0.25	0.10	0.44	0.44	0.27	0.61	0.61
Sat Flow, veh/h	1774	1863	1583	3548	0	3167	1774	5085	1583	3442	5024	194
Grp Volume(v), veh/h	100	78	34	526	0	651	52	1966	301	959	1167	630
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1583	1774	1695	1583	1721	1695	1828
Q Serve(g_s), s	10.0	7.4	3.7	26.6	0.0	22.8	4.9	64.1	15.6	49.0	36.7	36.8
Cycle Q Clear(g_c), s	10.0	7.4	3.7	26.6	0.0	22.8	4.9	64.1	15.6	49.0	36.7	36.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	99	100	85	532	0	1331	171	2213	689	937	2072	1117
V/C Ratio(X)	1.01	0.78	0.40	0.99	0.00	0.49	0.30	0.89	0.44	1.02	0.56	0.56
Avail Cap(c_a), veh/h	99	166	141	532	0	1443	171	2213	689	937	2072	1117
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.52	0.00	0.52	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.0	84.1	82.4	67.3	0.0	21.8	75.7	46.8	15.2	65.5	20.8	20.8
Incr Delay (d2), s/veh	94.7	12.4	3.0	25.1	0.0	0.1	1.0	5.8	2.0	35.5	1.1	2.1
Initial Q Delay(d3),s/veh	0.1	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	7.5	4.2	1.7	14.9	0.0	9.9	2.5	31.2	7.2	27.9	17.5	19.2
LnGrp Delay(d),s/veh	179.8	96.5	85.4	92.4	0.0	22.0	76.7	52.6	17.2	101.0	21.9	22.8
LnGrp LOS	F	F	F	F		C	E	D	B	F	C	C
Approach Vol, veh/h		212			1177			2319			2756	
Approach Delay, s/veh		134.0			53.4			48.5			49.6	
Approach LOS		F			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	53.0	82.3	31.0	13.6	21.3	114.0	14.0	30.7
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	49.0	72.0	27.0	16.0	11.0	110.0	10.0	33.0
Max Q Clear Time (g_c+I1), s	51.0	66.1	28.6	9.4	6.9	38.8	12.0	24.8
Green Ext Time (p_c), s	0.0	5.3	0.0	0.2	3.7	23.6	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	52.7
HCM 2010 LOS	D

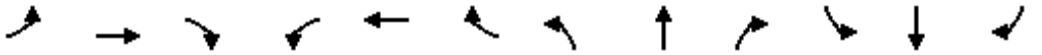
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	476	572	300	108	556	102	217	172	131	67	110	347
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	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	506	609	319	115	591	109	224	177	135	83	136	428
Adj No. of Lanes	1	2	1	1	3	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	553	1248	558	309	749	136	280	826	702	489	785	702
Arrive On Green	0.25	0.35	0.35	0.07	0.17	0.17	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1774	3539	1583	1774	4329	786	843	1863	1583	1063	1770	1583
Grp Volume(v), veh/h	506	609	319	115	461	239	224	177	135	83	136	428
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1724	843	1863	1583	1063	1770	1583
Q Serve(g_s), s	19.9	12.1	14.7	4.7	11.7	12.0	21.4	5.3	4.7	4.7	4.2	18.6
Cycle Q Clear(g_c), s	19.9	12.1	14.7	4.7	11.7	12.0	39.9	5.3	4.7	9.9	4.2	18.6
Prop In Lane	1.00		1.00	1.00		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	553	1248	558	309	587	299	280	826	702	489	785	702
V/C Ratio(X)	0.91	0.49	0.57	0.37	0.79	0.80	0.80	0.21	0.19	0.17	0.17	0.61
Avail Cap(c_a), veh/h	602	1337	598	322	603	307	280	826	702	489	785	702
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)	0.38	0.38	0.38	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	22.8	23.6	27.5	35.6	35.7	35.5	15.4	15.2	18.5	15.1	19.1
Incr Delay (d2), s/veh	8.2	0.1	0.4	0.7	6.6	13.8	20.8	0.6	0.6	0.7	0.5	3.9
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	10.8	5.9	6.4	2.4	6.0	6.9	7.2	2.8	2.1	1.5	2.1	8.8
LnGrp Delay(d),s/veh	29.2	22.9	24.1	28.3	42.2	49.5	56.3	16.0	15.8	19.2	15.6	23.0
LnGrp LOS	C	C	C	C	D	D	E	B	B	B	B	C
Approach Vol, veh/h		1434			815			536			647	
Approach Delay, s/veh		25.4			42.4			32.8			21.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.9	10.3	35.7		43.9	26.5	19.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	7.0	34.0		37.0	25.0	16.0
Max Q Clear Time (g_c+I1), s		41.9	6.7	16.7		20.6	21.9	14.0
Green Ext Time (p_c), s		0.0	0.0	9.4		6.7	0.6	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	208	492	73	78	455	224	120	97	91	202	100	185
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	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	219	518	77	82	479	236	136	110	103	227	112	208
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	876	130	283	769	344	611	993	844	666	993	844
Arrive On Green	0.12	0.28	0.28	0.05	0.22	0.22	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1774	3093	458	1774	3539	1583	1055	1863	1583	1164	1863	1583
Grp Volume(v), veh/h	219	295	300	82	479	236	136	110	103	227	112	208
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1583	1055	1863	1583	1164	1863	1583
Q Serve(g_s), s	8.2	12.9	13.0	3.2	11.0	12.3	6.6	2.6	2.9	10.8	2.7	6.4
Cycle Q Clear(g_c), s	8.2	12.9	13.0	3.2	11.0	12.3	9.3	2.6	2.9	13.5	2.7	6.4
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	501	505	283	769	344	611	993	844	666	993	844
V/C Ratio(X)	0.61	0.59	0.59	0.29	0.62	0.69	0.22	0.11	0.12	0.34	0.11	0.25
Avail Cap(c_a), veh/h	504	669	673	351	944	422	611	993	844	666	993	844
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	22.6	27.8	27.8	25.6	31.9	32.4	12.8	10.4	10.5	13.8	10.4	11.3
Incr Delay (d2), s/veh	1.7	1.1	1.1	0.6	0.9	3.4	0.8	0.2	0.3	1.4	0.2	0.7
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	4.1	6.5	6.6	1.6	5.5	5.7	2.1	1.4	1.3	3.7	1.4	2.9
LnGrp Delay(d),s/veh	24.4	28.9	28.9	26.2	32.8	35.8	13.6	10.7	10.8	15.2	10.7	12.0
LnGrp LOS	C	C	C	C	C	D	B	B	B	B	B	B
Approach Vol, veh/h		814			797			349			547	
Approach Delay, s/veh		27.7			33.0			11.8			13.0	
Approach LOS		C			C			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		52.0	8.6	29.5		52.0	14.5	23.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0	8.0	34.0		36.0	18.0	24.0
Max Q Clear Time (g_c+I1), s		11.3	5.2	15.0		15.5	10.2	14.3
Green Ext Time (p_c), s		4.0	0.0	7.8		3.9	0.4	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	437	209	135	182	223	587	115	2365	86	661	2398	247
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	1881	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	460	220	142	192	235	618	119	2438	89	689	2498	257
Adj No. of Lanes	2	1	1	1	1	2	1	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	334	284	238	228	882	138	2373	739	669	2968	924
Arrive On Green	0.13	0.18	0.18	0.07	0.12	0.12	0.08	0.47	0.47	0.19	0.58	0.58
Sat Flow, veh/h	3476	1881	1599	1774	1863	2787	1774	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	460	220	142	192	235	618	119	2438	89	689	2498	257
Grp Sat Flow(s),veh/h/ln	1738	1881	1599	1774	1863	1393	1774	1695	1583	1721	1695	1583
Q Serve(g_s), s	23.0	19.6	14.4	13.0	22.0	7.7	11.9	84.0	4.5	35.0	72.4	14.5
Cycle Q Clear(g_c), s	23.0	19.6	14.4	13.0	22.0	7.7	11.9	84.0	4.5	35.0	72.4	14.5
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	444	334	284	238	228	882	138	2373	739	669	2968	924
V/C Ratio(X)	1.04	0.66	0.50	0.81	1.03	0.70	0.87	1.03	0.12	1.03	0.84	0.28
Avail Cap(c_a), veh/h	444	334	284	238	228	882	158	2373	739	669	2968	924
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	78.5	68.9	66.8	68.7	79.0	30.2	82.1	48.0	16.6	72.5	30.7	18.6
Incr Delay (d2), s/veh	52.2	4.7	1.4	18.2	68.3	2.5	33.4	25.9	0.3	42.6	3.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	10.6	6.5	4.3	15.6	9.9	7.1	45.0	2.0	20.6	34.6	6.5
LnGrp Delay(d),s/veh	130.7	73.6	68.1	86.9	147.3	32.7	115.5	73.9	16.9	115.1	33.8	19.4
LnGrp LOS	F	E	E	F	F	C	F	F	B	F	C	B
Approach Vol, veh/h		822			1045			2646			3444	
Approach Delay, s/veh		104.6			68.5			73.8			49.0	
Approach LOS		F			E			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	39.0	88.0	17.0	36.0	18.0	109.0	27.0	26.0
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	35.0	84.0	13.0	32.0	16.0	103.0	23.0	22.0
Max Q Clear Time (g_c+I1), s	37.0	86.0	15.0	21.6	13.9	74.4	25.0	24.0
Green Ext Time (p_c), s	0.0	0.0	0.0	4.4	0.1	26.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.5
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	87.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	504	281	173	505	241	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	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	531	296	182	532	262	168

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	826	0	1308	413
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	630	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	800	-	~ 151	588
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	493	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	800	-	~ 117	588
Mov Cap-2 Maneuver	-	-	-	-	~ 117	-
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	381	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	$ 397.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	117	588	-	-	800	-
HCM Lane V/C Ratio	2.239	0.287	-	-	0.228	-
HCM Control Delay (s)	$ 644.2	13.6	-	-	10.8	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	22.5	1.2	-	-	0.9	-

Notes

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

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1305	901	32	0	95
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	97	97	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1332	929	33	0	119

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	929	0	-	0	1595	464
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	666	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	732	-	-	-	98	545
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	472	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	732	-	-	-	98	545
Mov Cap-2 Maneuver	-	-	-	-	98	-
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	472	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	732	-	-	-	545
HCM Lane V/C Ratio	-	-	-	-	0.218
HCM Control Delay (s)	0	-	-	-	13.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.8

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1053	813	42	0	82
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	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	97	97	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1074	838	43	0	102

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	838	0	-	0	1375	419
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	537	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	792	-	-	-	136	583
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	792	-	-	-	136	583
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	792	-	-	-	583
HCM Lane V/C Ratio	-	-	-	-	0.176
HCM Control Delay (s)	0	-	-	-	12.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.6

Intersection	
Int Delay, s/veh	0.4

Movement	NBL	NBR	SET	SER	NWL	NWT
Vol, veh/h	0	44	624	67	0	678
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	657	71	0	714

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1014	328	0	0	657	0
Stage 1	657	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	235	668	-	-	926	-
Stage 1	477	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	235	668	-	-	926	-
Mov Cap-2 Maneuver	235	-	-	-	-	-
Stage 1	477	-	-	-	-	-
Stage 2	679	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	668	926	-	-	-
HCM Lane V/C Ratio	0.088	-	-	-	-
HCM Control Delay (s)	10.9	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

Appendix G
Programmed Infrastructure Improvements

AR-ML-410

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	I-85 NORTH MANAGED LANES - INCLUDING SOUTHBOUND AUXILIARY LANE FROM SR 20 TO SR 317 AND NORTHBOUND AUXILIARY LANE FROM SR 20 TO SR 324 (GRAVEL SPRINGS ROAD) FROM OLD PEACHTREE ROAD TO HAMILTON MILL ROAD
GDOT Project No.	110600-
Federal ID No.	NHIM0-0085-02(164)
Status	Programmed
Service Type	Roadway / Managed Lanes
Sponsor	GDOT
Jurisdiction	Regional - Northeast
Analysis Level	In the Region's Air Quality Conformity Analysis
Existing Thru Lane	0
Planned Thru Lane	2

Network Year 2020

Corridor Length 14.0 miles

Detailed Description and Justification

Project involves the construction of a single concurrent managed lane in each direction along I-85 from Old Peachtree Road to Hamilton Mill Road. The project also involves the reconstruction of the I-85/I-985 interchange to allow for a right-hand general purpose lane exit from northbound I-85 to northbound I-985 and the conversion of the existing left-hand exit to a northbound I-85 to northbound I-985 Managed Lane system-level exit. Managed lanes along I-985 would extend north of I-85 a distance sufficient to taper them out - a distance of approximately 1.5 - 2.0 miles. The project would extend concurrent Managed Lanes along I-85 North, which have recently been extended as HOV2+ lanes from SR 316 to Old Peachtree Road as part of the I-85/SR 316 interchange project and which will be converted to HOT3+ lanes as part of the ongoing HOV2HOT conversion initiative. One new southbound general purpose/auxiliary lane will be constructed from SR 20 to SR 317. And one new northbound general purpose/auxiliary lane will be constructed from SR 20 to Gravel Springs 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	National Highway System	AUTH	2001	**$7,900,000**	~~$6,320,000~~	~~$1,580,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2013	**$1,090,184**	~~$872,147~~	~~$218,037~~	~~$0,000~~	~~$0,000~~
CST	National Highway Performance Program (NHPP)	AUTH	2013	**$6,484,816**	~~$5,187,853~~	~~$1,296,963~~	~~$0,000~~	~~$0,000~~
CST	Congestion Mitigation & Air Quality Improvement (CMAQ)	AUTH	2015	**$82,510,005**	~~$66,008,004~~	~~$16,502,001~~	~~$0,000~~	~~$0,000~~
CST	National Highway Performance Program (NHPP)	AUTH	2015	**$73,129,756**	~~$58,503,805~~	~~$14,625,951~~	~~$0,000~~	~~$0,000~~
CST	National Highway Performance Program (NHPP)		2016	**$3,580,000**	$2,856,000	$724,000	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2017	**$16,000,000**	$12,800,000	$3,200,000	$0,000	$0,000
				$190,694,761	**$152,547,809**	**$38,146,952**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
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.

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GW-020D

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	SR 20 (BUFORD DRIVE) WIDENING FROM I-85 NORTH TO ROCK SPRINGS ROAD
GDOT Project No.	0007850
Federal ID No.	CSSTP-0007-00(850)
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	GDOT
Jurisdiction	Regional - Northeast
Analysis Level	In the Region's Air Quality Conformity Analysis
Existing Thru Lane	4
Planned Thru Lane	8

Network Year	2030
Corridor Length	0.8 miles

Detailed Description and Justification

This project involves adding 2 lanes in each direction along SR 20 (Buford Drive) between I-85 North and Rock Springs Road.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	General Federal Aid 2022-2040		LR 2022-2030	**$14,281,187**	$11,424,950	$2,856,237	$0,000	$0,000
				$14,281,187	**$11,424,950**	**$2,856,237**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
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.

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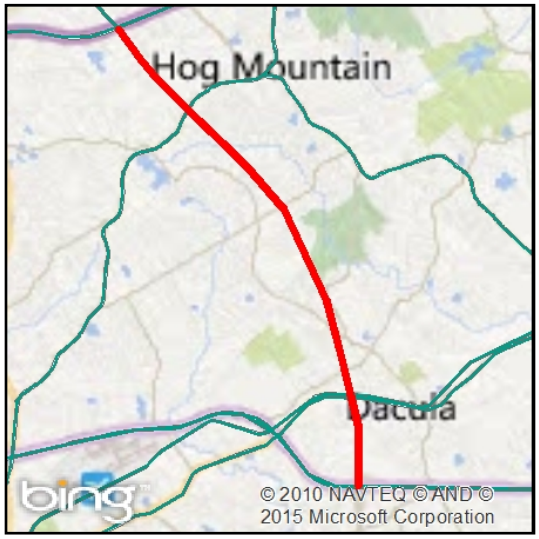
GW-308B

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	SUGARLOAF PARKWAY EXTENSION: PHASE 2 - NEW ALIGNMENT FROM SR 316 EAST OF LAWRENCEVILLE TO I-85
GDOT Project No.	0006924
Federal ID No.	CSSTP-0006-00(924)
Status	Programmed
Service Type	Roadway / General Purpose Capacity
Sponsor	Gwinnett County
Jurisdiction	Regional - Northeast
Analysis Level	In the Region's Air Quality Conformity Analysis
Existing Thru Lane	0
Planned Thru Lane	4



Network Year	2040
Corridor Length	6.8 miles

Detailed Description and Justification

This Buford/Dacula/East-Cross County Connector project consists of constructing a new 6.8 miles roadway from SR 316 east of Lawrenceville to I 85. The road will include a 4 lane divided highway with a raised median, bicycle and pedestrian facilities, turn lanes as well as grade separation at I-85, SR 124, Old Fountain Rd., Old Peachtree Rd, Fence Rd, SR 8, and SR 316. The project will add need roadway capacity and address peak period congestion in the northern part of the county experiencing rapid population and employment growth.

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	**$10,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$10,000,000~~
PE-OV	STP - Statewide Flexible (GDOT)	AUTH	2011	**$50,000**	~~$40,000~~	~~$10,000~~	~~$0,000~~	~~$0,000~~
ROW	Local Jurisdiction/Municipality Funds	AUTH	2010	**$17,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$17,000,000~~
ROW	Federal Earmark Funding		2016	**$5,624,375**	$4,499,500	$0,000	$0,000	$1,124,875
ROW	Local Jurisdiction/Municipality Funds		2016	**$30,542,625**	$0,000	$0,000	$0,000	$30,542,625
UTL	Local Jurisdiction/Municipality Funds		LR 2031-2040	**$10,355,000**	$0,000	$0,000	$0,000	$10,355,000
CST	General Federal Aid 2022-2040		LR 2031-2040	**$179,647,295**	$143,717,836	$35,929,459	$0,000	$0,000
				$253,219,295	**$148,257,336**	**$35,939,459**	**$0,000**	**$69,022,500**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
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.

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GW-308C

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	SUGARLOAF PARKWAY EXTENSION: PHASE 3 - NEW ALIGNMENT FROM I-85 TO PEACHTREE INDUSTRIAL BOULEVARD
GDOT Project No.	0006925
Federal ID No.	CSSTP-0006-00(925)
Status	Programmed
Service Type	Roadway / General Purpose Capacity
Sponsor	Gwinnett County
Jurisdiction	Gwinnett County
Analysis Level	In the Region's Air Quality Conformity Analysis
Existing Thru Lane	0
Planned Thru Lane	4

Network Year	2040
Corridor Length	5.8 miles

Detailed Description and Justification

This East-Cross County Connector project consists of constructing a new roadway from I-85 to Peachtree Industrial Blvd. The road will include a 4 lane divided highway with a raised median, bicycle and pedestrian facilities, turn lanes as well as grade separation at Norfolk Southern Railroad, Buford Hwy, Satellite Blvd. and I-985. The project will add roadway capacity and address peak period congestion in the northern part of the county experiencing rapid population and employment growth.

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	**$8,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$8,000,000~~
ROW	Local Jurisdiction/Municipality Funds	AUTH	2010	**$8,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$8,000,000~~
ROW	Federal Earmark Funding		2017	**$2,699,700**	$2,159,760	$0,000	$0,000	$539,940
UTL	Local Jurisdiction/Municipality Funds		LR 2031-2040	**$6,106,500**	$0,000	$0,000	$0,000	$6,106,500
CST	Local Jurisdiction/Municipality Funds		LR 2031-2040	**$109,415,586**	$0,000	$0,000	$0,000	$109,415,586
				$134,221,786	**$2,159,760**	**$0,000**	**$0,000**	**$132,062,026**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
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.

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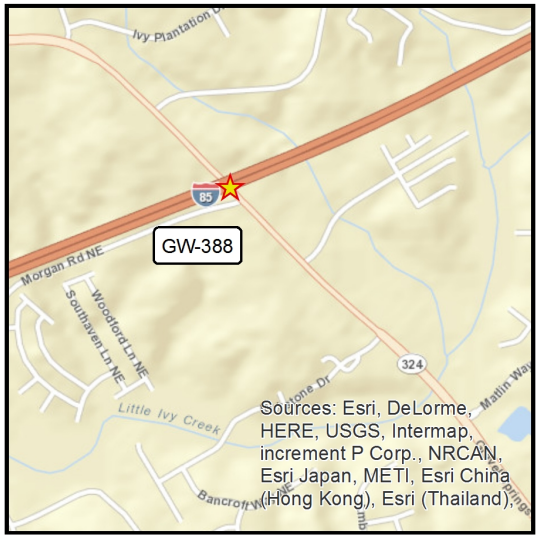
GW-388

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	I-85 NORTH - NEW INTERCHANGE AT SR 324 (GRAVEL SPRINGS ROAD)
GDOT Project No.	0012698
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Interchange Capacity
Sponsor	Gwinnett County
Jurisdiction	Gwinnett County
Analysis Level	In the Region's Air Quality Conformity Analysis
Existing Thru Lane	N/A
Planned Thru Lane	N/A



Network Year	2024
Corridor Length	N/A miles

Detailed Description and Justification

The project serves trips to/from multiple jurisdictions including Gwinnett, Hall, Barrow and Jackson Counties and also serves freight traffic traveling in the southeastern United States. This new interchange will provide access to existing development within the area and provide a solution to address the anticipated increase in local traffic volume (including trucks) resulting from planned development. The project serves origins or destinations of trips to/from and within major existing and proposed employment and activity centers throughout the region. The project improves one of the most congested regional corridors as determined through ARC's Congestion Management Process. SR 324 (Gravel Springs Road) is a facility on the Regional Strategic Transportation System. ARC regional travel demand model calculations indicate that the completed project will reduce congestion on Hamilton Mill Road north of I?85 by 15% compared to future conditions without the project. I-85 North is included on GDOT's official Freight Corridor Network and therefore designated as a key strategic highway route that handles the flow of freight to and from locations in Georgia.The Interchange Justification Report (IJR) has been approved by both GDOT and FHWA. The selected alternative is full diamond interchange. The recent road widening on SR 324 and new bridge construction over I-85 were designed and constructed to accommodate a future interchange at this location. Also, right-of-way acquisitions for the roadway and bridge projects considered a future interchange at this location.

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	2014	**$1,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$1,000,000~~
PE	STP - Statewide Flexible (GDOT)	AUTH	2015	**$50,000**	~~$40,000~~	~~$10,000~~	~~$0,000~~	~~$0,000~~
ROW	STP - Urban (>200K) (ARC)		2017	**$7,472,000**	$4,000,000	$0,000	$0,000	$3,472,000
UTL	Local Jurisdiction/Municipality Funds		2019	**$62,000**	$0,000	$0,000	$0,000	$62,000
CST	National Highway Performance Program (NHPP)		2019	**$11,000,000**	$8,800,000	$2,200,000	$0,000	$0,000
				$19,584,000	**$12,840,000**	**$2,210,000**	**$0,000**	**$4,534,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
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.

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