DEVELOPMENT OF REGIONAL IMPACT
(DRI #4074)

TRAFFIC STUDY
FOR
CASCADE PALMETTO HIGHWAY AND RIDGE ROAD
(DRI # 4074)

CITY OF SOUTH FULTON, GEORGIA

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A & R Project # 24-015

EXECUTIVE SUMMARY

Traffic impacts were evaluated for the proposed residential development that will be located to the northeast of the intersection of SR 154 and Cedar Grove Road / Ridge Road in the City of South Fulton, Georgia. The development will consist of:

- Single-Family Detached Housing: 491 units
- Townhomes: 152 units

The development proposes access at the following locations:

- Site Driveway 1: Full access driveway on SR 154
- Site Driveway 2: Full access (western) driveway on Ridge Road, aligned with Clark Road
- Site Driveway 3: Full access (eastern) driveway on Ridge Road, west of Bethlehem Road

Existing and future traffic operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. SR 92 @ Thompson Road
2. SR 92 @ Hall Road
3. SR 92 @ Jones Road
4. SR 92 @ Demooney Road
5. SR 92 @ Ridge Road / Butner Road
6. SR 92 @ SR 154
7. SR 92/SR 154 @ SR 166
8. Ridge Road @ Clark Road / Site Driveway 2 (Western)
9. Ridge Road @ Bethlehem Road
10. Bethlehem Road @ Clark Road
11. Cedar Grove Road @ Bethlehem Road
12. South Fulton Parkway @ Cedar Grove Road
13. SR 154 @ Site Driveway 1
14. Ridge Road @ Site Driveway 3 (Eastern)

Traffic Operations Summary

As per GRTA requirements, all approaches that do not meet the level-of-service (LOS) standard (considered failing) are required to be shown under Traffic Operations Summary along with the project's total added trip and the respective percentage of overall total "Build" condition approach traffic volume for all failing LOS approaches after all improvements are completed. Since all approaches at all study intersections will meet the level-of-service standard with the recommended 'system improvements', we do not have anything to report here.

The results of the "No-Build" traffic operations show that the signalized study intersection of SR 92 at SR 154 will operate at an overall level-of-service "E" in the PM peak hour with the westbound and northbound approaches operating with LOS "E" in PM peak hour.

Results of "Build" conditions traffic operations show that the intersection of SR 92 and SR 154 will continue to operate at level of service "E" as in "No-Build" conditions with some additional delays. The eastbound and northbound approaches will operate at level of service "E" and the westbound approach will operate at level of service "F" in the PM peak hour. All other study intersections will operate satisfactorily.

After the recommended system improvements are implemented, the intersection of SR 92 at SR 154 will operate at LOS "D" or better in both the AM and PM peak hours.

Recommendations for System Improvements

A summary of the system improvements, which address deficiencies that are found within the existing road network for the "No-Build" conditions, is provided below.

Intersection 6: SR 92 @ SR 154

The results of the "No-Build" traffic operations show that the signalized study intersection of SR 92 at SR 154 will operate at an overall level-of-service "E" in the PM peak hour with the westbound and northbound approaches operating with LOS "E" in PM peak hour.

- Addition of a right turn lane on the westbound approach (Cascade Palmetto Highway/SR 70)

After the recommended system improvements are implemented, the intersection of SR 92 at SR 154 will operate at LOS "D" or better in both the AM and PM peak hours.

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections:

- Site Driveway 1: Full access driveway on SR 154
  - One entering and one exiting lane.
  - Stop-sign controlled on the driveway approach with SR 154 remaining free flow.
  - Left Turn Lane and Right Turn Lane on SR 154 for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

- Site Driveway 2: Full access (western) driveway on Ridge Road, aligned with Clark Road
  - One entering and one exiting lane.
  - Stop-sign controlled on the driveway and Clark Road approaches.
  - Left Turn Lane and Right Turn Lane on Ridge Road for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

- Site Driveway 3: Full access (eastern) driveway on Ridge Road
  - One entering and one exiting lane.
  - Stop-sign controlled on the driveway approach with Ridge Road remaining free flow.
  - Left Turn Lane and Right Turn Lane on Ridge Road for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

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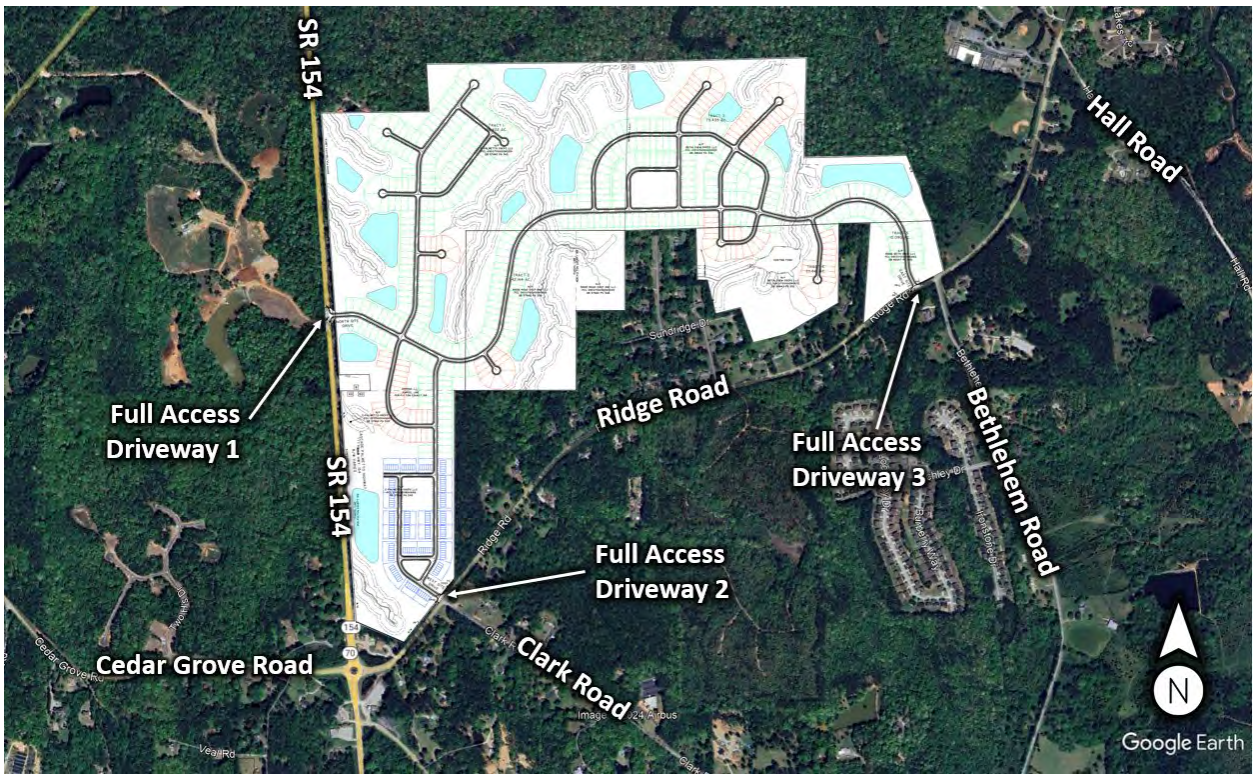
INTRODUCTION

The purpose of this study is to determine the traffic impact from the proposed residential development that will be located to the northeast of the intersection of SR 154 and Cedar Grove Road / Ridge Road in the City of South Fulton, Georgia. The traffic analysis evaluates the current operations and the future conditions with the traffic generated by the development. The development will consist of:

- Single-Family Detached Housing: 491 units
- Townhomes: 152 units



The development proposes access at the following locations:

- Site Driveway 1: Full access driveway on SR 154
- Site Driveway 2: Full access (western) driveway on Ridge Road, aligned with Clark Road
- Site Driveway 3: Full access (eastern) driveway on Ridge Road, west of Bethlehem Road

This study includes the evaluation of traffic operations for the AM and PM peak hours at the intersections of:

1. SR 92 @ Thompson Road
2. SR 92 @ Hall Road
3. SR 92 @ Jones Road
4. SR 92 @ Demooney Road
5. SR 92 @ Ridge Road / Butner Road

6. SR 92 @ SR 154
7. SR 92/SR 154 @ SR 166
8. Ridge Road @ Clark Road / Site Driveway 2 (Western)
9. Ridge Road @ Bethlehem Road
10. Bethlehem Road @ Clark Road
11. Cedar Grove Road @ Bethlehem Road
12. South Fulton Parkway @ Cedar Grove Road
13. SR 154 @ Site Driveway 1
14. Ridge Road @ Site Driveway 3 (Eastern)

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report.

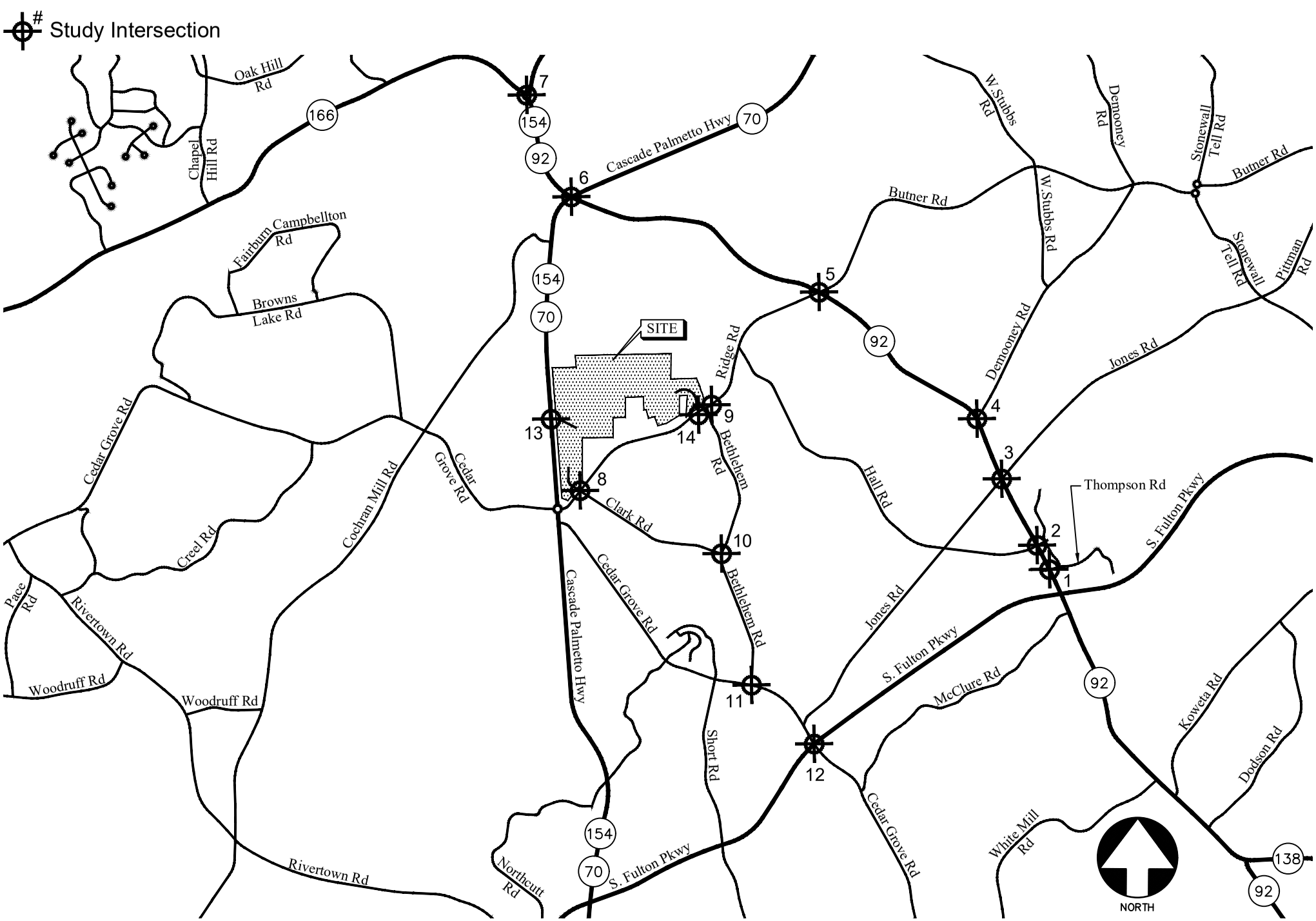
STUDY NETWORK DETERMINATION

The study network was determined by evaluating the amount of traffic that the proposed development will add to each roadway segment in the area. According to GRTA requirements, a roadway segment carries a "significant" amount of traffic if the project contributes 7% or more trips to the two-way daily service volumes of the roadway at the appropriate level of service standard. Upon agreement with GRTA a level of service standard of "D" was used for determining the study area network.

The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. The following study intersections fell within the 7% rule and/or have been selected as being suitable for evaluation in discussions with ARC, GRTA, GDOT, Fulton County, City of South Fulton, City of Chattahoochee Hills, City of Union City and Douglas County:

1. SR 92 @ Thompson Road
2. SR 92 @ Hall Road
3. SR 92 @ Jones Road
4. SR 92 @ Demooney Road
5. SR 92 @ Ridge Road / Butner Road
6. SR 92 @ SR 154
7. SR 92/SR 154 @ SR 166
8. Ridge Road @ Clark Road / Site Driveway 2 (Western)
9. Ridge Road @ Bethlehem Road
10. Bethlehem Road @ Clark Road
11. Cedar Grove Road @ Bethlehem Road
12. South Fulton Parkway @ Cedar Grove Road
13. SR 154 @ Site Driveway 1
14. Ridge Road @ Site Driveway 3 (Eastern)

The location of the development and the surrounding study network is shown in Figure 1. Other intersections within this corridor, such as unsignalized side streets, right-in / right-out driveways or private driveways have not been included in the study network.



LOCATION MAP AND STUDY INTERSECTIONS

FIGURE 1

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EXISTING ROADWAY FACILITIES

The following is a brief description of each of the roadway facilities located in proximity to the site:

State Route 154 (SR 154)

State Route 154 (SR 154) is a north-south, two-lane, undivided roadway with a posted speed limit of 55 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID 121-0370) indicate that the daily traffic volume on SR 154 in 2022 was 8,350 vehicles per day north of Cedar Grove Road / Ridge Road. GDOT classifies SR 154 as an Urban Minor Arterial roadway.

State Route 92 (SR 92)

State Route 92 (SR 92) is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. Towards the north of Ridge Road / Butner Road, the posted speed limit on SR 92 increases to 50 mph and then to 55 mph south of Chattahoochee River. GDOT traffic counts (Station ID 121-0294) indicate that the daily traffic volume on SR 92 in 2022 was 11,700 vehicles per day north of Ridge Road / Butner Road. GDOT classifies SR 92 as an Urban Principal Arterial roadway.

State Route 166 (SR 166)

State Route 166 (SR 166) is a north-south, two-lane, undivided roadway with a posted speed limit of 55 mph in the vicinity of the site. GDOT traffic counts (Station ID 097-0101) indicate that the daily traffic volume on SR 166 in 2022 was 10,100 vehicles per day northwest of SR 92/SR 154. GDOT classifies SR 166 as an Urban Minor Arterial roadway.

South Fulton Parkway

South Fulton Parkway is an east-west, four-lane, median-divided roadway with a posted speed limit of 55 mph in the vicinity of the site. GDOT traffic counts (Station ID's 121-0981 & 121-6056) indicate that the daily traffic volume on South Fulton Parkway in 2022 was 21,800 vehicles east of SR 92 and 5,630 vehicles east of SR 154. GDOT classifies South Fulton Parkway as an Urban Principal Arterial roadway.

Ridge Road

Ridge Road is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph. GDOT traffic counts (Station ID 121-0733) indicate that the daily traffic volume on Ridge Road in 2022 was 730 vehicles per day east of Farnsborough Drive. GDOT classifies Ridge Road as an Urban Minor Arterial roadway.

Cedar Grove Road

Cedar Grove Road is a two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID's 121-0773 & 121-0757) indicate that the daily traffic volume on Cedar Grove Road in 2022 was 2,890 vehicles per day west of Short Road and 720 vehicles per day east of West Teal Road. GDOT classifies Cedar Grove Road as an Urban Major Collector roadway west of Short Road and as a Rural Major Collector roadway east of West Teal Road.

Clark Road

Clark Road is a north-south, two-lane, undivided roadway without any posted speed limit.

Bethlehem Road

Bethlehem Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph.

Butner Road

Butner Road is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID 121-0734) indicate that the daily traffic volume on Butner Road in 2022 was 2,700 vehicles per day east of Deep Creek. GDOT classifies Butner Road as an Urban Minor Arterial roadway.

Demooney Road

Demooney Road is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

Jones Road

Jones Road is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph to the east of SR 92 and 35 mph to the west of SR 92. GDOT traffic counts (Station ID 121-8077) indicate that the daily traffic volume on Jones Road in 2022 was 180 vehicles per day west of SR 92. GDOT classifies Jones Road as an Urban Local roadway.

Hall Road

Hall Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph to the east of Line Creek and 35 mph to the west of Line Creek.

Thompson Road

Thompson Road is an east-west, two-lane, undivided roadway without any posted speed limit.

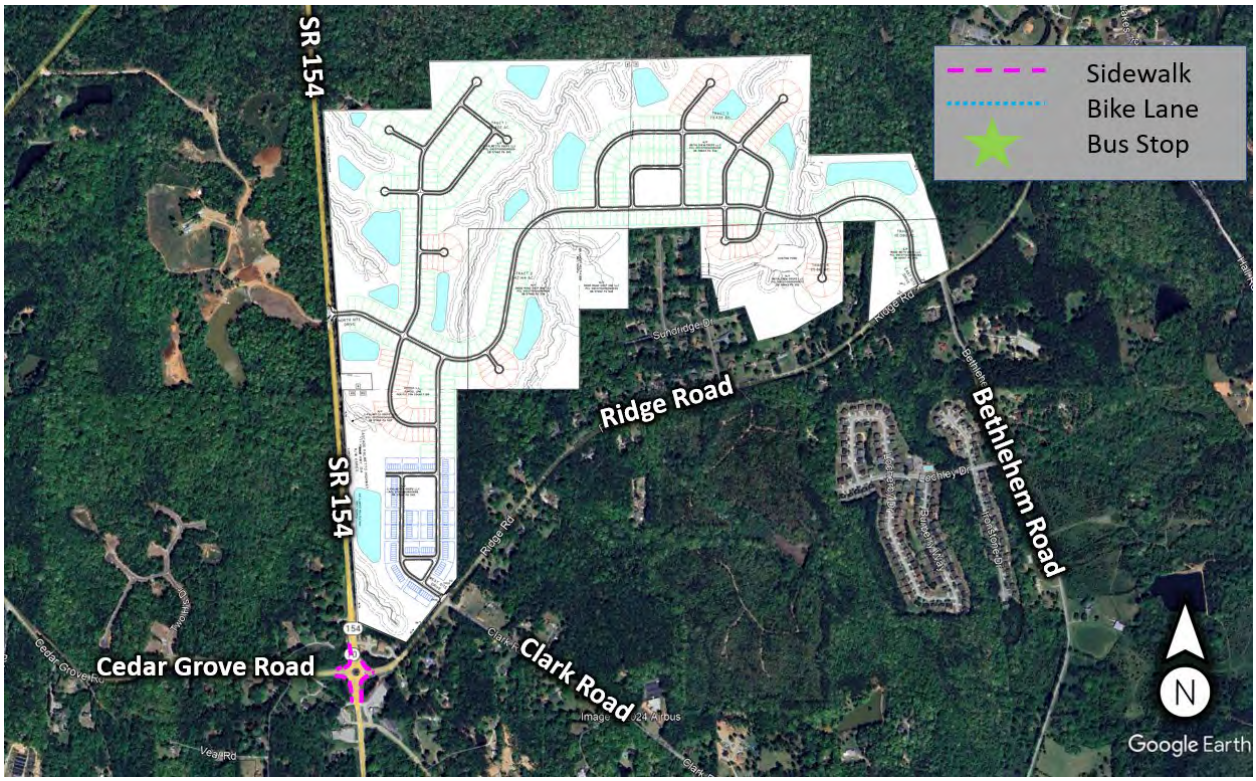
Existing Bicycle and Pedestrian Facilities

- Sidewalk is present on the north side of Ridge Road from approximately 700 feet west of Arlington Christian School's access point to Hall Road
- Sidewalk is present on the east side of SR 92 from South Fulton Parkway through Thompson Road to Hall Road, in the vicinity of Winstar Lane, and south of Ridge Road/Butner Road for approximately 0.4 miles to Giverney Boulevard
- Sidewalk is present on the west side of SR 92 for approximately 500 feet south of Hall Road and north of Jones Road to 550 feet north of Estonian Drive
- Sidewalk is present on the west side of Bethlehem Road from approximately 700 feet north to 200 feet south of Lochley Drive
- Sidewalks are present on Hall Road on:
    - east of SR 92 to Bentley Drive (south side)
    - west of Bentley Drive for appx. 100 feet (north side), but it does not connect to SR 92
    - west of SR 92 for approximately 1,250 feet (south side)
    - from approximately 1,250 feet west of SR 92 to Jones Road (north side)
    - from Jones Road to 200 feet west of Langston Hughes High School's western driveway (south side)
- Sidewalks are present at the intersections of:
    - SR 154 and Cedar Grove Road/Ridge Road on all approaches of the roundabout
    - SR 92 and Ridge Road/Butner Road on both sides of the eastbound approach, on the south side of the westbound approach and on the east side of the northbound approach
    - SR 92/SR 154 and SR 166 on all approaches of the roundabout
    - SR 92 and Thompson Road on the south side of the eastbound approach and both sides of the westbound approach
    - SR 92 and Hall Road on the south side of the eastbound and westbound approaches
    - SR 92 and Jones Road on the south side of the westbound approach
    - South Fulton Parkway and Cedar Grove Road on west side of the northbound approach
- Crosswalks are present at the intersections of:
    - SR 154 and Cedar Grove Road/Ridge Road on all approaches of the roundabout
    - SR 92 and Thompson Road along with pedestrian signal heads on all approaches
    - SR 92 and Hall Road on all approaches
    - SR 92 and Ridge Road/Butner Road on the eastbound approach
    - SR 92 and SR 154 along with pedestrian signal heads on all approaches
    - SR 92/SR 154 and SR 166 on all approaches of the roundabout
    - South Fulton Parkway and Cedar Grove Road on all approaches
- Streetlights are present at the intersections of:
    - SR 154 and Cedar Grove Road / Ridge Road on all approaches
    - SR 92/SR 154 and SR 166 on all approaches
    - SR 92 and Thompson Road on the south side of the eastbound approach

- A shared use path for pedestrians and bicyclists is present at the roundabout intersection of SR 92/SR 154 and SR 166
- From the shared use path at SR 92/SR 154 and SR 166 roundabout, there are bicycle lanes on:
    - SR 166 for approximately 600 feet west
    - SR 92/SR 154 for approximately 700 feet north
    - SR 92/SR 154 for approximately 300 feet south
- The South Fulton Scenic Byway bicycle route, also called the City of Chattahoochee Hills' Silk Sheets Bicycle Route, runs along Cedar Grove Road west of Cochran Mill Road approximately one mile west of SR 154 and along Cochran Mill Road north and south of Cedar Grove Road. It runs along SR 154 from Cochran Mill Road to Church Street, and along Church Street from SR 154 to SR 92. It crosses SR 92 at Church Street approximately 500 feet north of SR 154 and runs to City of Chattahoochee Hills' Campbellton Park, which is approximately two miles from the Project. On Cochran Mill Road south of Cedar Grove Road, it connects to Bear Creek Nature Center and Cochran Mill Park approximately five miles from the Project, and it intersects the City of Chattahoochee Hills' Dirty Sheets Bicycle Route at Cochran Mill Park.

The graphic below includes the location of existing sidewalks in the study network within 0.25-mile proximity of the site. Other than the sidewalks at the roundabout at the intersection of SR 154 and Cedar Grove Road/Ridge Road, there are no sidewalks, bike lanes or bus stop within 0.25 mile of the site.

Existing Alternative Transportation Map



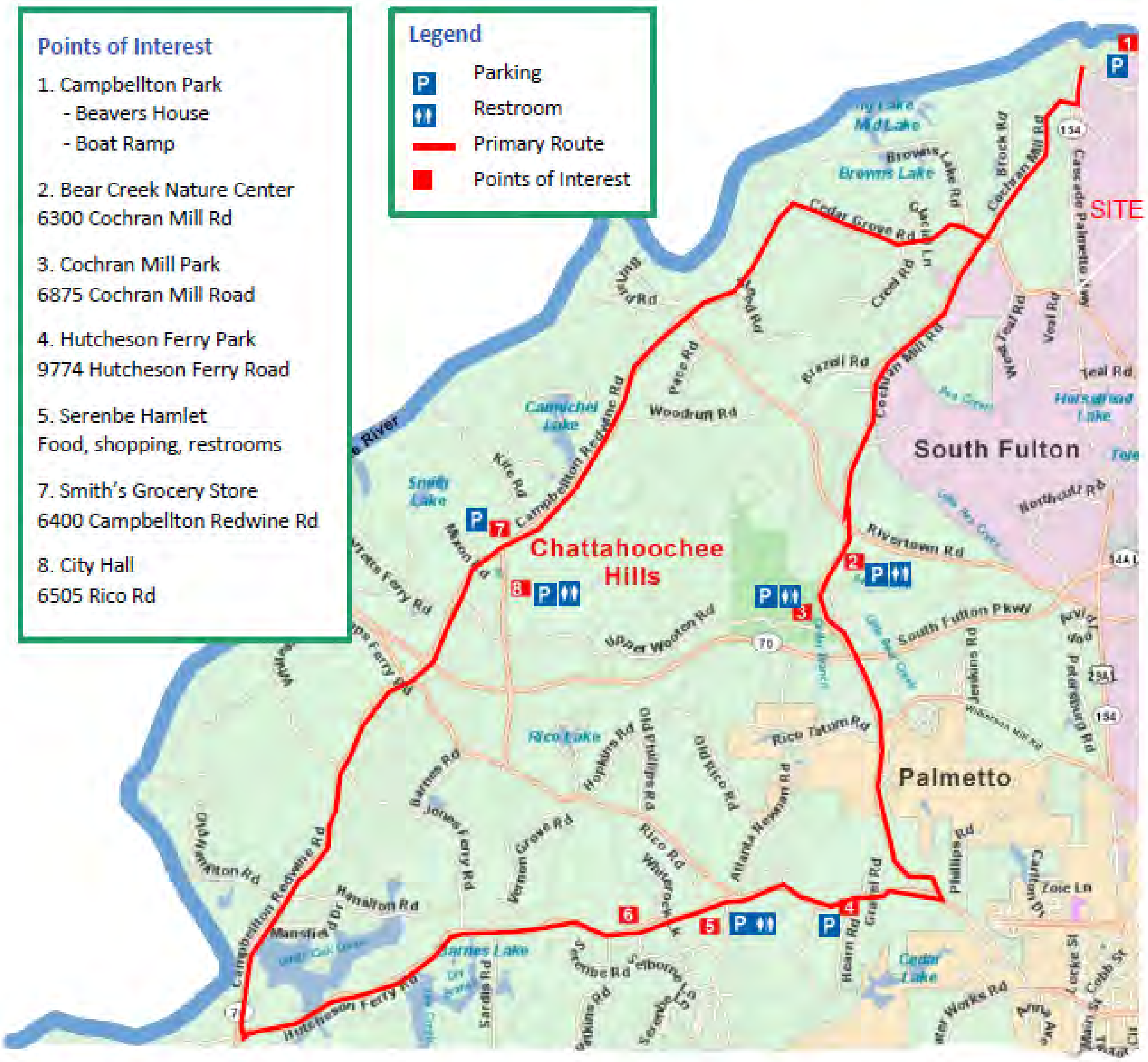
Explore the Nature of Chattahoochee Hills

South Fulton Scenic Byway

www.chatthillsga.us

The Georgia Scenic Byways program adopted this 29-mile loop in Chattahoochee Hills as its first scenic byway in 1998. The route showcases the scenic rolling hills, forested ridges, and serene pastures along Cochran Mill Road, Hutcheson Ferry Road and State Highway 70.

Along the route, visitors can enjoy Campbellton Park, Cochran Mill Park, Bear Creek Nature Center, and Hutcheson Ferry Park, which provide many recreational opportunities. Two other attractions include Smith's Grocery Store, which has served the area for more than 100 years, and the Serenbe Hamlet with its many shops and restaurants.



Explore the Nature of Chattahoochee Hills

Silk Sheets Bicycle Route

www.chatthillsga.us

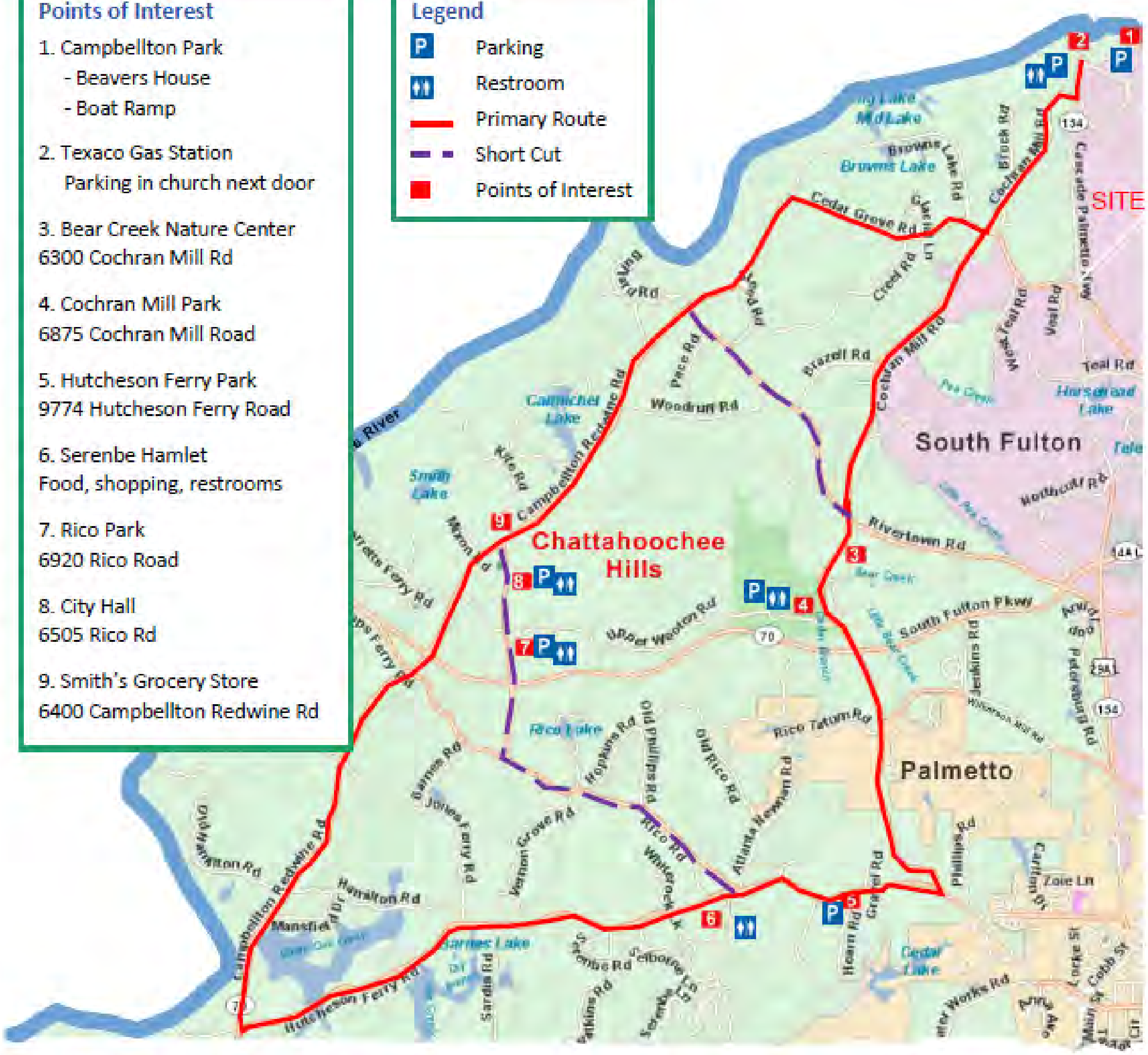
Chattahoochee Hills has long been known as a mecca for bicycle riders. In the early 80s, long before Chatt Hills became a city, bicyclists found their way to our paved roads through favorite rides shared in the Southern Bicycle League magazine. Nicknamed the Silk Sheets, the 29-mile route wound around the rural countryside in what would later become Georgia's first Scenic Byway. There are several different stories on how this route got its name. Some say silk sheets refer to the smooth paved roads, while others say the name came before the roads were paved. A more colorful version claims this was the route where a scantily-clad lady could be seen hanging her silk sheets out to dry.

Points of Interest

1. Campbellton Park
   - Beavers House
   - Boat Ramp
2. Texaco Gas Station
   Parking in church next door
3. Bear Creek Nature Center
   6300 Cochran Mill Rd
4. Cochran Mill Park
   6875 Cochran Mill Road
5. Hutcheson Ferry Park
   9774 Hutcheson Ferry Road
6. Serenbe Hamlet
   Food, shopping, restrooms
7. Rico Park
   6920 Rico Road
8. City Hall
   6505 Rico Rd
9. Smith's Grocery Store
   6400 Campbellton Redwine Rd

Legend

- P — Parking
- Restroom
- Primary Route
- Short Cut
- Points of Interest



Explore the Nature of Chattahoochee Hills

Dirty Sheets Bicycle Route

www.chatthillsga.us

The Dirty Sheets is a 20-mile bicycle route along the scenic gravel roads in Chattahoochee Hills. The route is available on the Strava and Ride with GPS apps. A popular place to begin is at Cochran Mill Park (6875 Cochran Mill Rd). However, since parking is limited at the Park, the City offers free overflow parking behind City Hall (6505 Rico Rd), at Rico Park (6920 Rico Rd), or Hutcheson Ferry Park (9774 Hutcheson Ferry Rd).

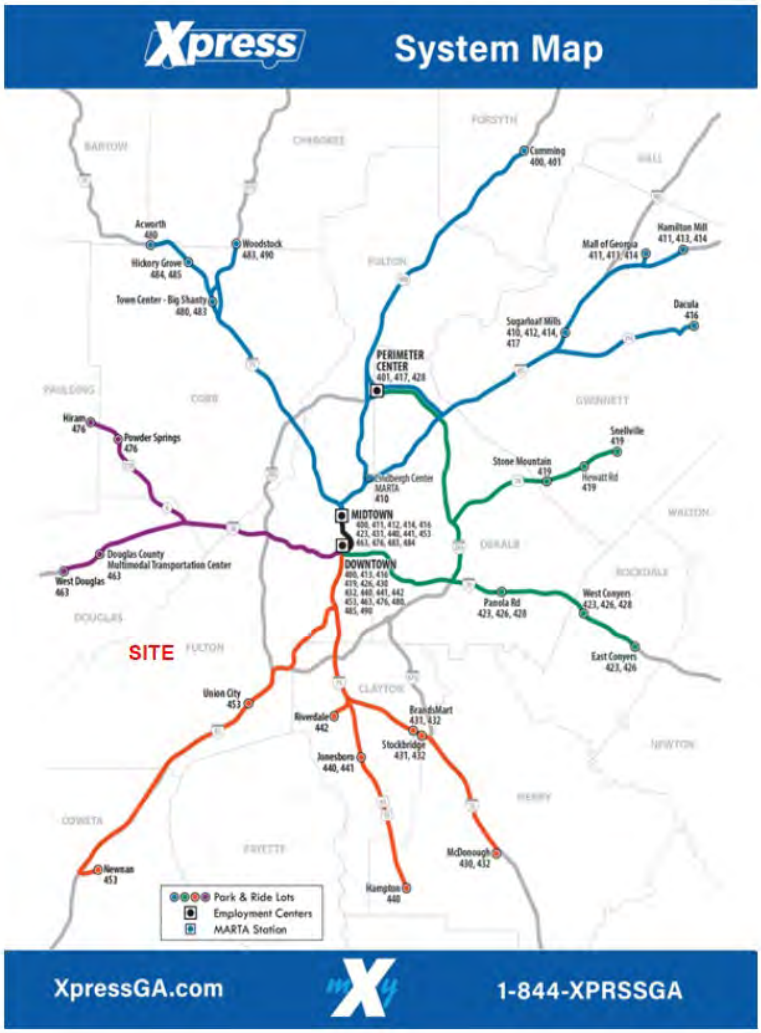
Cue Sheet - Beginning from Rico Park (6920 Rico Rd, Chattahoochee Hills, GA 30268)

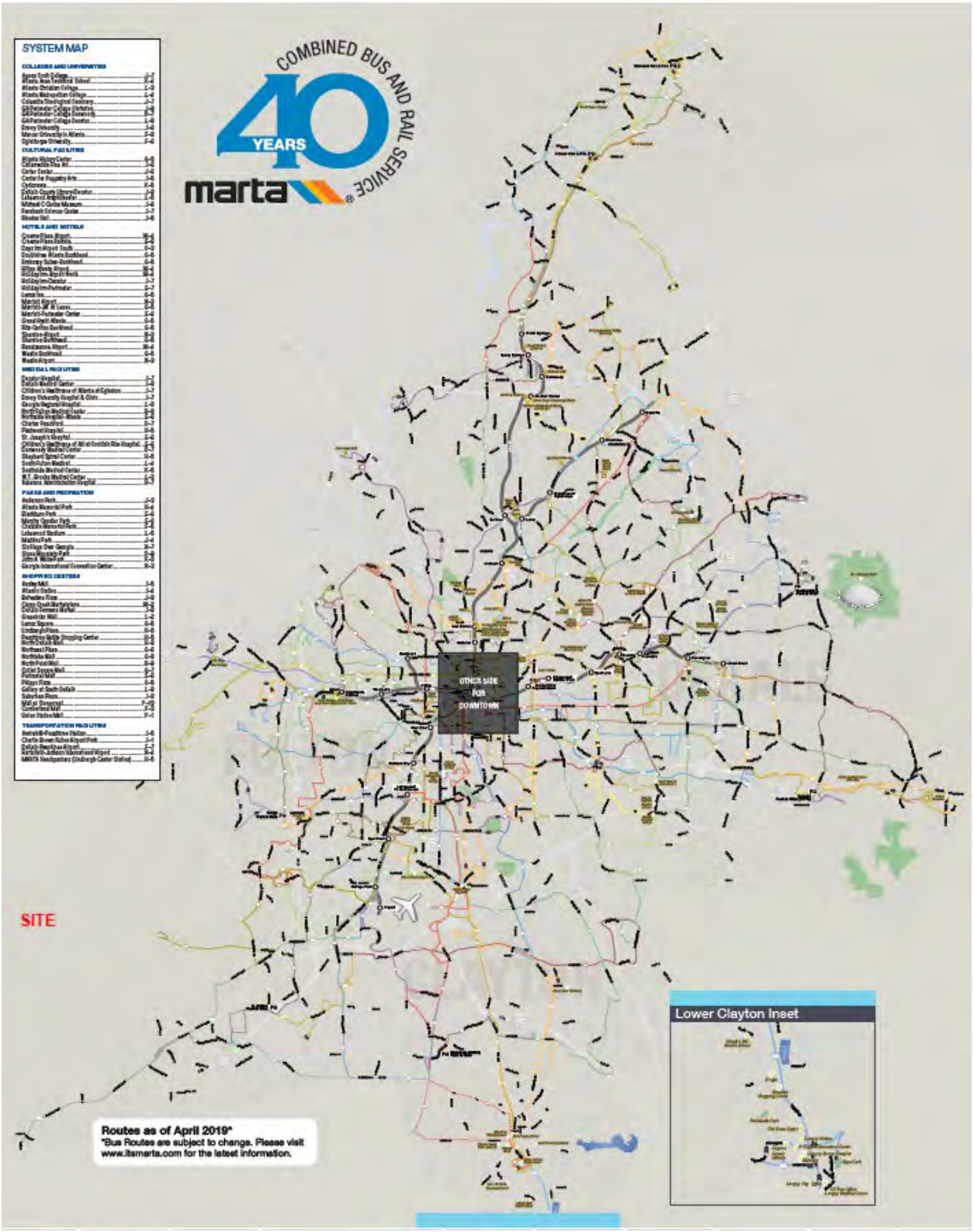
★ **Start of route** – Left on Upper Wooten Rd	Miles
Continue on Garretts Ferry Rd	0.06
Keep right onto Garretts Ferry Rd	1.06
Left onto South Fulton Parkway	2.69
Cross SF Parkway Gate and Capps Ferry Rd	2.7
Right onto Whiteside Rd	2.92
Left onto Jones Ferry Rd	4.27
Left onto Hutchensons Ferry Rd	7.75
Left onto Vernon Grove Rd	8.09
Right onto Rico Rd	9.92

Left onto Hopkins Rd	10.06
Right onto Old Rico Rd	11.31
Left onto Atlanta-Newnan Rd	13
Keep left onto Atlanta-Newnan Rd	13.67
Right onto Rico Tatum Rd	14.24
Left onto Cochran Mill Rd	15.17
Left into Cochran Mill Park	16.4
Go through the gate before the parking lot	16.43
Keep on Upper Wooten Gravel Rd	17.12
End of route	20.14

Alternative Modes of Access

- There are no transit routes in the study network.
- There are no high-capacity transit stations in the vicinity of the proposed development.
- The closest Metropolitan Atlanta Rapid Transit Authority (MARTA) bus routes are between six and seven miles away in the City of South Fulton, Union City, Palmetto, and Fairburn. The closest is Route 82, Camp Creek/South Fulton Parkway, which runs from Derrick Road on South Fulton Parkway to the College Park rail station. MARTA's Combined Bus and Rail Service System Map is attached.
- The Atlanta-Region Transit Link Authority (ATL) Xpress Route 453 runs from the Union City Park-and-Ride, which is approximately twelve miles away, to downtown Atlanta. Xpress Route 463 runs from the Douglas County Multi-Modal Transportation Center, which is approximately thirteen miles away, to downtown Atlanta.
- The closest MARTA rail station is sixteen miles away in College Park.




SYSTEM MAP
COMBINED BUS AND RAIL SERVICE
40 YEARS
marta
OTHER SIDE
RUN
DOWNTOWN
SITE
Lower Clayton Inset
Routes as of April 2019*
*Bus Routes are subject to change. Please visit
www.itsmarta.com for the latest information.

STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designed as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long delays.

TABLE 1 – LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 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

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio greater than 1.0 for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersections.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle)*	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 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

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6th edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favorable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

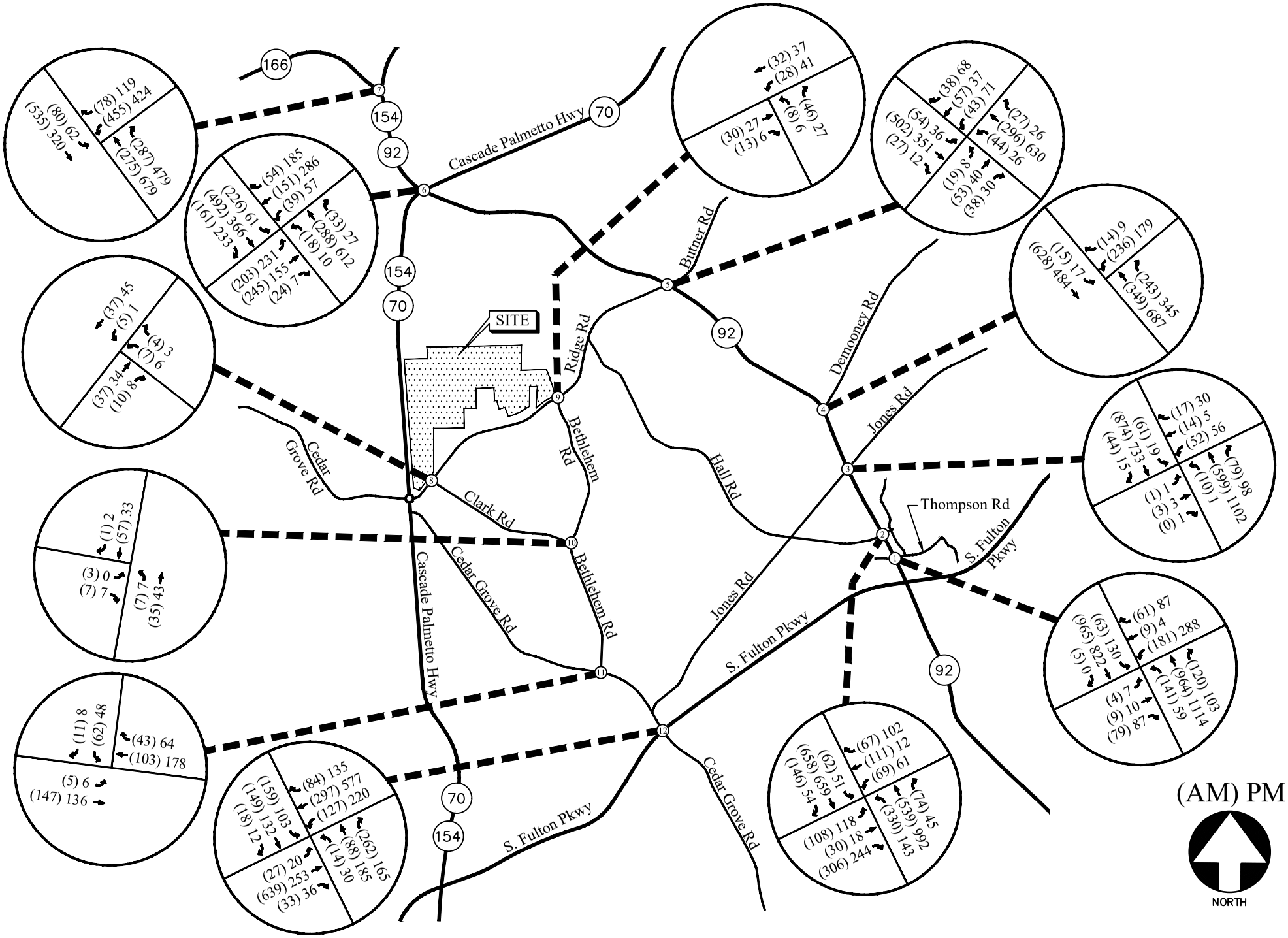
EXISTING 2024 TRAFFIC ANALYSIS

Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. SR 92 @ Thompson Road
2. SR 92 @ Hall Road
3. SR 92 @ Jones Road
4. SR 92 @ Demooney Road
5. SR 92 @ Ridge Road / Butner Road
6. SR 92 @ SR 154
7. SR 92/SR 154 @ SR 166
8. Ridge Road @ Clark Road
9. Ridge Road @ Bethlehem Road
10. Bethlehem Road @ Clark Road
11. Cedar Grove Road @ Bethlehem Road
12. South Fulton Parkway @ Cedar Grove Road

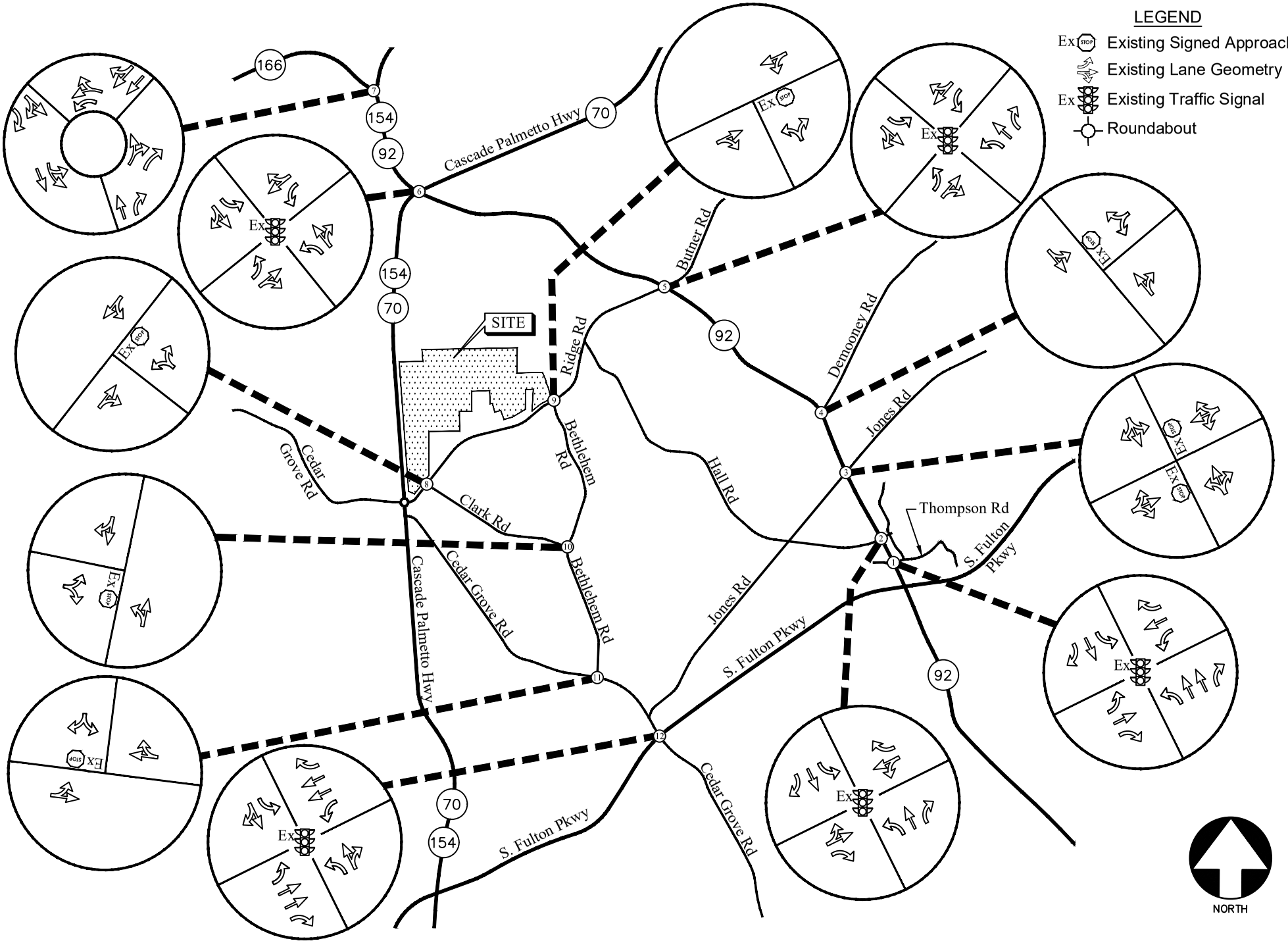
Turning movement counts were collected on Thursday, January 11, 2024. All turning movement counts were recorded during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. Truck data was included separately in the counts. The four consecutive 15-minute interval volumes that produced the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2

A&R Engineering Inc.



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3

A&R Engineering Inc.

Existing Traffic Operations

Existing 2024 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. Per GDOT PI's #0015593 and #0017398, the three intersections of SR 92 at Ridge Road / Butner Road, SR 92 at Jones Road, and SR 92 at Demooney Road are scheduled to be converted into roundabouts in 2024. As per MMP, these intersections have also been analyzed separately with a roundabout traffic control in the existing 2024 analysis and results with both traffic controls are given below in Table 3.

TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	AM Peak	PM Peak	LOS Standard
1	**SR 92 @ Thompson Road**	Signalized	**B (10.1)**	**B (16.7)**	**D/D**
	-Eastbound Approach		D (43.3)	C (34.9)	D/D
	-Westbound Approach		D (52.8)	D (51.9)	D/D
	-Northbound Approach		A (9.7)	B (17.7)	D/D
	-Southbound Approach		A (2.3)	A (4.2)	D/D
2	**SR 92 @ Hall Road**	Signalized	**B (17.2)**	**B (10.6)**	**D/D**
	-Eastbound Approach		D (53.5)	D (54.8)	D/D
	-Westbound Approach		D (50.7)	D (50.3)	D/D
	-Northbound Approach		A (5.3)	A (3.2)	D/D
	-Southbound Approach		B (16.3)	A (9.9)	D/D
3	**SR 92 @ Jones Road**	Existing Stop Controlled on EB and WB Approaches			
	-Eastbound Approach		F (63.1)	F (80.3)	-
	-Westbound Approach		F (228.0)	F (**)	-
	-Northbound Left		A (9.9)	A (9.3)	-
	-Southbound Left		A (9.2)	B (11.7)	-
3*	**SR 92 @ Jones Road**	*Scheduled Roundabout**	**A (6.1)**	**A (6.9)**	**D/D**
	-Eastbound Approach		A (6.2)	A (5.4)	D/D
	-Westbound Approach		A (5.4)	A (9.4)	D/D
	-Northbound Approach		A (5.3)	A (7.5)	D/D
	-Southbound Approach		A (6.7)	A (5.7)	D/D
4	**SR 92 @ Demooney Road**	Existing Stop Controlled on WB Approach			
	-Westbound Approach		F (200.3)	F (250.6)	-
	-Southbound Left		A (8.8)	B (10.6)	-
4*	**SR 92 @ Demooney Road**	*Scheduled Roundabout**	**A (5.8)**	**A (6.3)**	**D/D**
	-Westbound Approach		A (6.1)	A (7.9)	D/D
	-Northbound Approach		A (4.8)	A (6.6)	D/D
	-Southbound Approach		A (6.6)	A (5.2)	D/D
5	**SR 92 @ Ridge Road / Butner Road**	Existing Signalized	**B (14.7)**	**B (14.1)**	-
	-Eastbound Approach		D (53.1)	D (50.6)	-
	-Westbound Approach		D (54.2)	D (54.4)	-
	-Northbound Approach		A (3.5)	A (5.0)	-
	-Southbound Approach		A (4.1)	A (3.9)	-
5*	**SR 92 @ Ridge Road / Butner Road**	*Scheduled Roundabout**	**A (7.5)**	**A (8.3)**	**D/D**
	-Eastbound Approach		A (7.2)	A (5.3)	D/D
	-Westbound Approach		A (5.5)	A (9.1)	D/D
	-Northbound Approach		A (6.0)	A (9.4)	D/D
	-Southbound Approach		A (9.1)	A (6.6)	D/D

6	**SR 92 @ SR 154** -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	Signalized	**C (33.2)** D (45.7) E (63.5) C (22.5) B (19.4)	**D (48.3)** D (43.9) E (66.0) D (49.3) C (29.0)	**D/D** D/D D/D D/D D/D
7	**SR 92/SR 154 @ SR 166** -Westbound Approach -Northbound Approach -Southbound Approach	Roundabout	**A (5.9)** A (6.4) A (2.5) A (8.7)	**A (6.6)** B (10.1) A (5.2) A (6.1)	**D/D** D/D D/D D/D
8	**Ridge Road @ Clark Road** -Westbound Approach -Southbound Left	Stop Controlled on WB Approach	A (8.9) A (7.3)	A (9.0) A (7.3)	D/D D/D
9	**Ridge Road @ Bethlehem Road** -Westbound Left -Northbound Approach	Stop Controlled on NB Approach	A (7.4) A (8.9)	A (7.4) A (8.8)	D/D D/D
10	**Bethlehem Road @ Clark Road** -Eastbound Approach -Northbound Left	Stop Controlled on EB Approach	A (9.0) A (7.4)	A (8.6) A (7.3)	D/D D/D
11	**Cedar Grove Road @ Bethlehem Road** -Eastbound Left -Southbound Approach	Stop Controlled on SB Approach	A (7.6) B (10.9)	A (7.8) B (11.3)	D/D D/D
12	**South Fulton Parkway @ Cedar Grove Road** -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	Signalized	**C (33.4)** C (28.9) C (21.8) D (53.9) C (34.9)	**C (29.0)** C (20.9) B (17.9) D (53.6) D (35.7)	**D/D** D/D D/D D/D D/D

* SR 92 at Ridge Rd/Butner Rd, SR 92 at Jones Rd and SR 92 at Demooney Rd evaluated with roundabouts instead of with existing stop-controlled intersections due to GDOT PI's #0015593 and #0017398 converting them into roundabouts in 2024

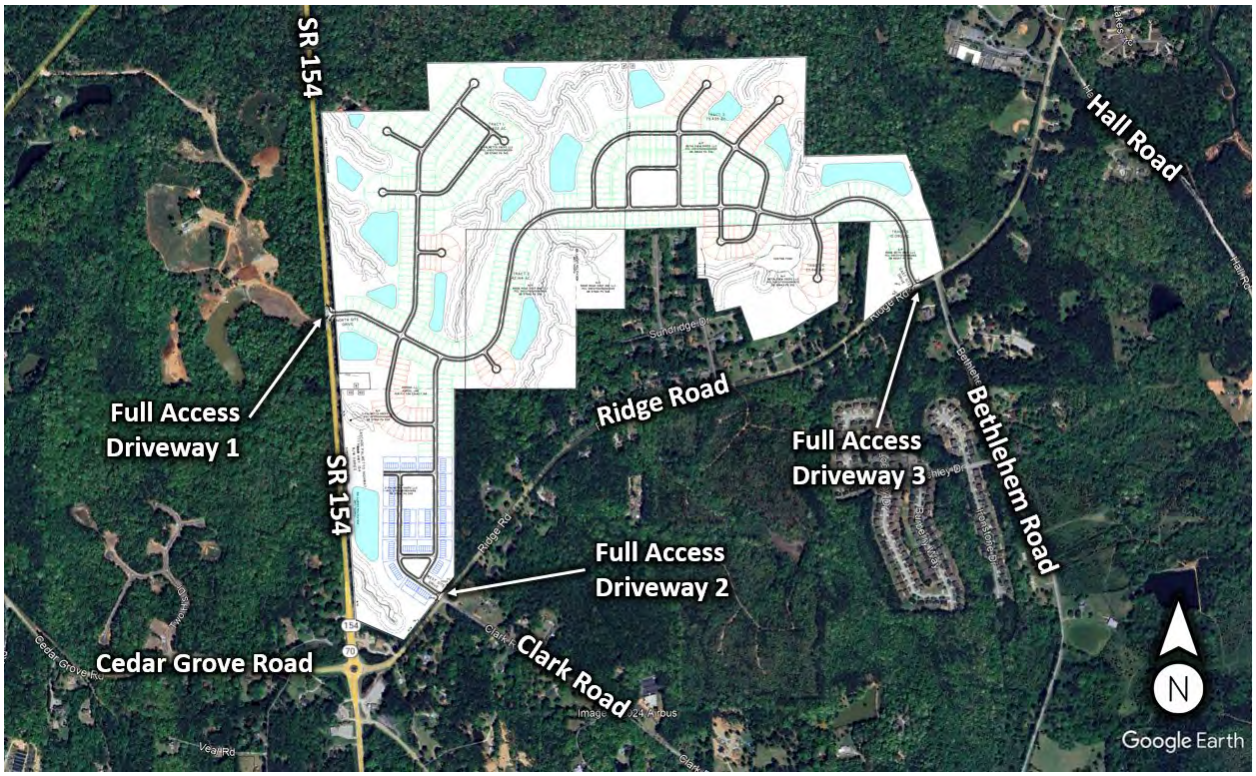
** Delay exceeds 300 seconds

The results of the existing traffic operations analysis indicate that the westbound approach of SR 154 (Cascade Palmetto Highway) at the signalized study intersection of SR 92 at SR 154 is operating at level-of-service "E" in both peak hours. The stop-controlled approaches at the unsignalized intersections of SR 92 at Jones Road and SR 92 at Demooney Road have LOS "F" in both the AM and PM peak hours with the existing minor-stop traffic control. With a roundabout, these two intersections will operate at LOS "D" or better.

PROJECT DESCRIPTION

The proposed residential development will be located to the northeast of the intersection of SR 154 and Cedar Grove Road / Ridge Road in the City of South Fulton, Georgia. The development will consist of:

- Single-Family Detached Housing: 491 units
- Townhomes: 152 units



The development proposes access at the following locations:

- Site Driveway 1: Full access driveway on SR 154
- Site Driveway 2: Full access (western) driveway on Ridge Road, aligned with Clark Road
- Site Driveway 3: Full access (eastern) driveway on Ridge Road, west of Bethlehem Road

Site Plan

A site plan is shown in Figure 4. A digital copy of the site plan is also provided with this report.

BUILDING AREA	
SINGLE FAMILY 50'x130' RESIDENTIAL (121 LOTS)	+/-.786,500 SF
SINGLE FAMILY 60'x130' RESIDENTIAL(370 LOTS)	+/-2,886,000 SF
TOWNHOMES (152 20'X50' UNITS)	+/-152,000 SF
TOTAL BUILDOUT SQUARE FEET (643 TOTAL SINGLE FAMILY UNITS)	+/- 3,824,500 SF
PROPOSED DENSITY	1.97 UNITS/ACRE
SITE DATA	
SITE ADDRESS	CASCADE PALMETTO HWY, FAIRBURN, GA 30213
TOTAL SITE AREA	327 ACRES
BUILDABLE AREA	+/-240 ACRES
PROPOSED OPEN SPACE	+/-130 ACRES
RESIDENTIAL FRONT SETBACK	20'
RESIDENTIAL SIDE SETBACK (INTERIOR LOTS)	5'
RESIDENTIAL SIDE SETBACK (CORNER LOTS)	15'
RESIDENTIAL REAR SETBACK	20'
NUMBER OF STORIES	2 STORIES MAXIMUM
SINGLE FAMILY PARKING (O/F OF STREET, 2 SPACES PER UNIT)	982 SPACES
TOWNHOMES PARKING (O/F OF STREET, 2 SPACES PER UNIT)	304 SPACES
TOTAL PARKING	1286 SPACES
PROPOSED SIDEWALK (BOTH SIDE OF INTERIOR ROADWAY)	5'
DRI APPLICATION NUMBER	4074, CASCADE PALMETTO HIGHWAY & RIDGE ROAD
ZONING	
EXISTING ZONING	AGRICULTURE
PROPOSED ZONING	COMMUNITY UNIT PLAN
PARCEL ID	(5) 07-0301-0080-069-9, 09C-0700-0008-021-9, 09C-0700-0009-055-6, 09C-0700-0009-005-1, 09C-0700-0009-014-3
ZONING JURISDICTION	CITY OF SOUTH FULTON
SETBACK REQUIREMENTS	
ALONG CASCADE PALMETTO HIGHWAY & RIDGE ROAD	50' FRONTAGE BUFFER W/ 10' IMPROVEMENT SETBACK
ZONING BUFFER (405.01)(b)(1)	100'
REAR LANDSCAPE SETBACK OF PROPERTY	25'
ROW: PROPOSED MAJOR STREETS	50' MINOR STREETS 44'
UNDISTURBED STATE BUFFER	25'
UNDISTURBED CITY BUFFER	75'
IMPERVIOUS SETBACK	100'
TURNING LANES' STORAGE & TAPER	
NORTH ACCESS RIGHT TURNING LANE STORAGE	250'
NORTH ACCESS RIGHT TURING LANE TAPER	100'
NORTH ACCESS LEFT TURNING LANE STORAGE	330'
NORTH ACCESS LEFT TURING LANE TAPER	100'
WEST ACCESS RIGHT TURNING LANE STORAGE	175'
WEST ACCESS RIGHT TURING LANE TAPER	100'
WEST ACCESS LEFT TURNING LANE STORAGE	235'
WEST ACCESS LEFT TURNING LANE TAPER	100'
EAST ACCESS RIGHT TURNING LANE STORAGE	175'
EAST ACCESS RIGHT TURNING LANE TAPER	100'
EAST ACCESS LEFT TURNING LANE STORAGE	235'
EAST ACCESS LEFT TURNING LANE TAPER	100'

NOTES:
1. NO PORTIONS OF THE SITE ARE LOCATED WITHIN A 100yr-FLOOD HAZARD CONFIRMED BY FLOOD AREA ID 13121C_23963, .
2. THERE ARE NO EXISTING BUILDINGS ON SITE.
3. ENTIRE PROPERTY IS CURRENTLY WOODED
4. NO PORTION OF THIS SITE IS WITHIN FAR 150 AIRPORT NOISE ZONE

END OF 5' SIDEWALK

PRIVATE DRIVEWAY

PROPOSED MINOR STREET STOP

START OF PROPOSED 5' SIDEWALK

END OF 5' SIDEWALK

PROPOSED MINOR STREET STOP

START OF PROPOSED 5' SIDEWALK

END OF 5' SIDEWALK

PROPOSED MINOR STREET STOP

START OF PROPOSED 5' SIDEWALK

GDOT PI 0006864 SINGLE LANE ROUNDABOUT COMPLETED IN 2016

DRI NUMBER: 4074
NAME: CASCADE PALMETTO HIGHWAY & RIDGE ROAD

SITE UTILITIES
CABLE: COMCAST
GAS: ATLANTA GAS LIGHT
TELEPHONE: AT&T
ELECTRIC: GREYSTONE POWER CORP.
WATER: CITY OF ATLANTA DWM
SANITARY SEWER: FULTON COUNTY DWR

CLIENT
GASKIN BANKS
2 WILLIAMS STREET SC ,29601
(843) 816-7907

CIVIL:
THOMAS & HUTTON
5553 PEACHTREE ROAD, SUITE 175
CHAMBLEE, GA 30341
(470) 893-1700

SURVEYOR:
THOMAS & HUTTON
5074 BRISTOL INDUSTRIAL WAY
UNIT-A BUFORD GA 30518
(770) 271-2868

AQUATIC RESOURCES CONSULTANT
RLC
41 PARK OF COMMRCE WAY, SUITE
101 SAVANNAH, GA 31405
(912) 443-5896

KEY

TOWNHOMES

50' SINGLE FAMILY

60' SINGLE FAMILY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
5553 Peachtree Road • Suite 175
Chamblee, GA 30341 • 470.893.1700
www.thomasandhutton.com

GASKIN BANKS
CITY OF SOUTH FULTON, GEORGIA

CASCADE PALMETTO HIGHWAY TRACT

Figure 1A: 30120.000I- SITE LAYOUT PLAN

JOB NO:	J-30120.000I
DATE:	12/6/23
DRAWN:	AP
DESIGNED:	AP
REVIEWED:	GP
APPROVED:	GP
SCALE:	1" = 200'

EXHIBIT

Planned Bicycle and Pedestrian Facilities

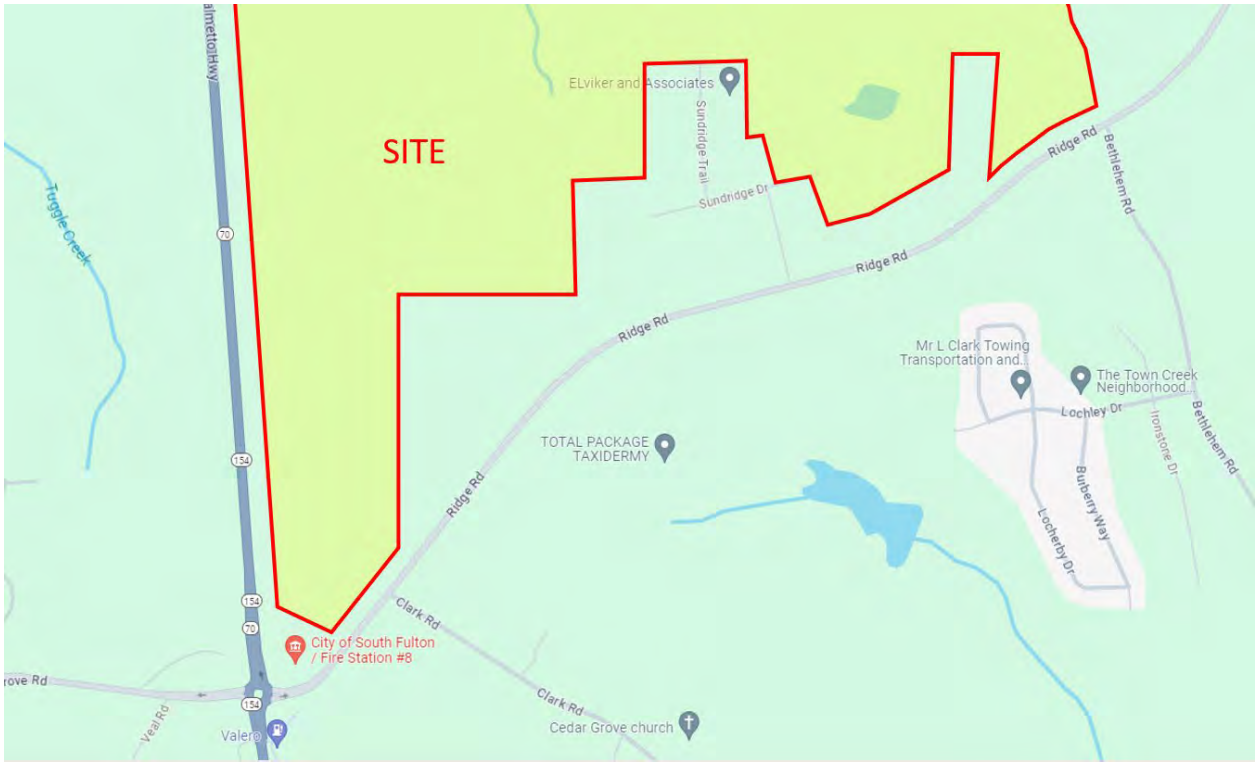
The project will have five-foot wide sidewalks on both sides of the internal streets. Sidewalk is proposed on the east side of SR 154 for 70 feet to the north and for 205 feet to the south of Site Driveway 1, on the north side of Ridge Road for 160 feet to the east and for 22 feet to the west of Site Driveway 2 (Western), and on the north side of Ridge Road for 160 feet to the east and for 16 feet to the west of Site Driveway 3 (Eastern).

Potential Pedestrian and Bicycle Destinations

Potential pedestrian and bicycle destinations within 0.25-mile of the vicinity of the proposed development include:

- Valero gas station at SR 154 and Cedar Grove Road (east)

These potential destinations are shown in the aerial below.



The City of South Fulton Future Land Use Map shows the area within 0.25 miles of the intersection of Ridge Road/Cedar Grove Road and SR 154, except for the area that is part of the Project, as Local Live Work. The 0.25-mile area extends east along the south side of Ridge Road to Clark Road; Site Driveway 2 (Western) will align with Clark Road. In the future, the City plans for there to be a balanced mix of commercial, office, and residential uses within 0.25 miles of the project. The sidewalk proposed on the north side of Ridge Road at Site Driveway 2 (Western) could provide a pedestrian connection between the project and the Village Live-Work area.

Sidewalk Ordinances

At this time, it appears that the City of South Fulton's Subdivision Regulations require single family residential subdivisions to place a sidewalk along both sides of all internal publicly dedicated streets. Single family residential subdivisions shall be required to place a sidewalk along the development's frontage on external publicly dedicated streets. Sidewalks for residential development shall have a minimum width of five feet. Sidewalks along publicly dedicated streets shall be located within the public right-of-way and shall be set off the street curb by a minimum three-foot wide landscape strip. Confirmation of the City of South Fulton' sidewalk requirements has been requested.

Code of Ordinances for Cedar Grove Overlay District:

- **Sec. 507.08. - Sidewalks/pedestrian paths.**

(a) Sidewalks are required along all public and private road frontages (except alleys) and shall meet all applicable Americans with Disabilities Act (ADA) standards.
(b) Sidewalks and other paths (multi-purpose or pedestrian) shall be illustrated on the site plan submitted at the time of application for a land disturbance permit.
(c) Sidewalks shall be a minimum width of five feet.
(d) Pedestrian paths may be constructed of either colored/textured materials or conventional sidewalk materials and shall be clearly identified.
(e) Multi-use paths for bicycles and pedestrians may be substituted for the required sidewalks as approved by the CDRA Director and the Public Works Director when the path is part of an approved transportation plan.
(f) Multi-use paths designed for use by bicyclists and pedestrians shall be 12 feet wide.
(g) Multi-use paths designed with separate paths for bicyclists and pedestrians shall be 15 feet wide, ten feet for bicycles and five feet for pedestrians.
(h) Street furniture shall be located outside the specified width of any path.
(i) Sidewalks and paths shall be connected to signalized crosswalks where applicable.
(j) Sidewalks and paths shall be designed to minimize direct auto-pedestrian interaction.
(k) Sidewalks and paths should be direct and convenient routes between points of origin (such as a bus stop) and destination (such as a shop, bank, etc.).
(l) Pedestrian access should be provided to all entrances including access from rear parking areas.
(m) Inter-parcel connectivity shall be required for multiuse, pedestrian paths and sidewalks.

Sec. 507.09. - Lighting.

(a) A lighting plan for open parking lots and pedestrian paths shall be submitted for approval prior to the issuance of a land disturbance permit.
(b) Streetlights shall be installed on all interior streets within community crossroads, as identified in the South Fulton Comprehensive Plan.
(c) Open parking lots and walkways providing access thereto shall be lighted at a minimum of two-foot candles measured at grade level.
(d) The maximum to minimum foot candle level shall not exceed a 12:1 ratio.
(e) Non-LED shoebox fixtures, cobra lighting fixtures, and neon lighting are prohibited.

(f) Any luminaire with a lamp or lamps rated at a total of more than 1,800 lumens, and all flood or spot luminaires with a lamp or lamps rated at a total of more than 900 lumens, shall not emit any direct light above a horizontal plane through the lowest direct-light-emitting part of the luminaire.
(g) Any luminaire with a lamp or lamps rated at a total of more than 1,800 lumens, and all flood or spot luminaires with a lamp or lamps rated at a total of more than 900 lumens, shall be mounted at a height equal to or less than the value 3 + (D/3), where D is the distance in feet to the nearest property boundary. The maximum height of the luminaire may not exceed 20 feet.
(h) Any luminaire with a lamp or lamps rated at a total of 1,800 lumens or less, and all flood or spot luminaires with a lamp or lamps rated at 900 lumens or less, may be used without restriction to light distribution or mounting height, except that if any spot of flood luminaire rated 900 lumens or less is aimed, directed, or focused such as to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways, the luminaire shall be redirected or its light output controlled as necessary to eliminate such conditions.
(i) Luminaires used for public-roadway illumination may be installed at a maximum height of 25 feet and may be positioned at that height up to the edge of any bordering property.
(j) All temporary emergency lighting needed by police, fire or other emergency services, as well as all emergency vehicular luminaires, shall be exempt from the requirements of this Section.
(k) All hazard warning luminaires required by federal regulatory agencies are exempt from the requirements of this Section, except that all luminaries used must be red and must be shown to be as close as possible to the federally required minimum lumen output requirement for the specific task.
(l) Luminaires used primarily for sign illumination may be mounted at any height to a maximum of 25 feet, regardless of lumen rating.
(m) Lighting fixtures used to illuminate a billboard shall be mounted on the top of the sign structure. All such fixtures shall use a type of shielding to direct lighting downward. Bottom-mounted sign lighting is prohibited.
(n) The use of laser source light or any similar high intensity light used outdoors is prohibited.
(o) The operation of searchlights is prohibited.

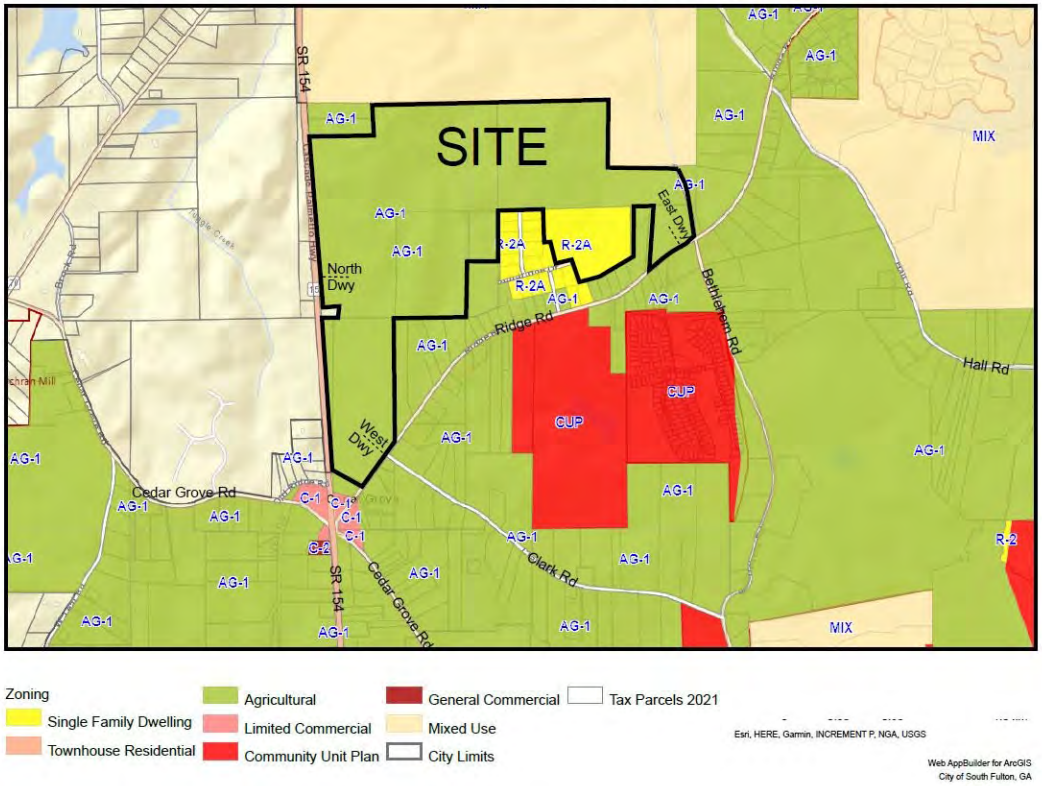
Planned Transit Facilities

There is no existing or planned public transit service near the proposed development.

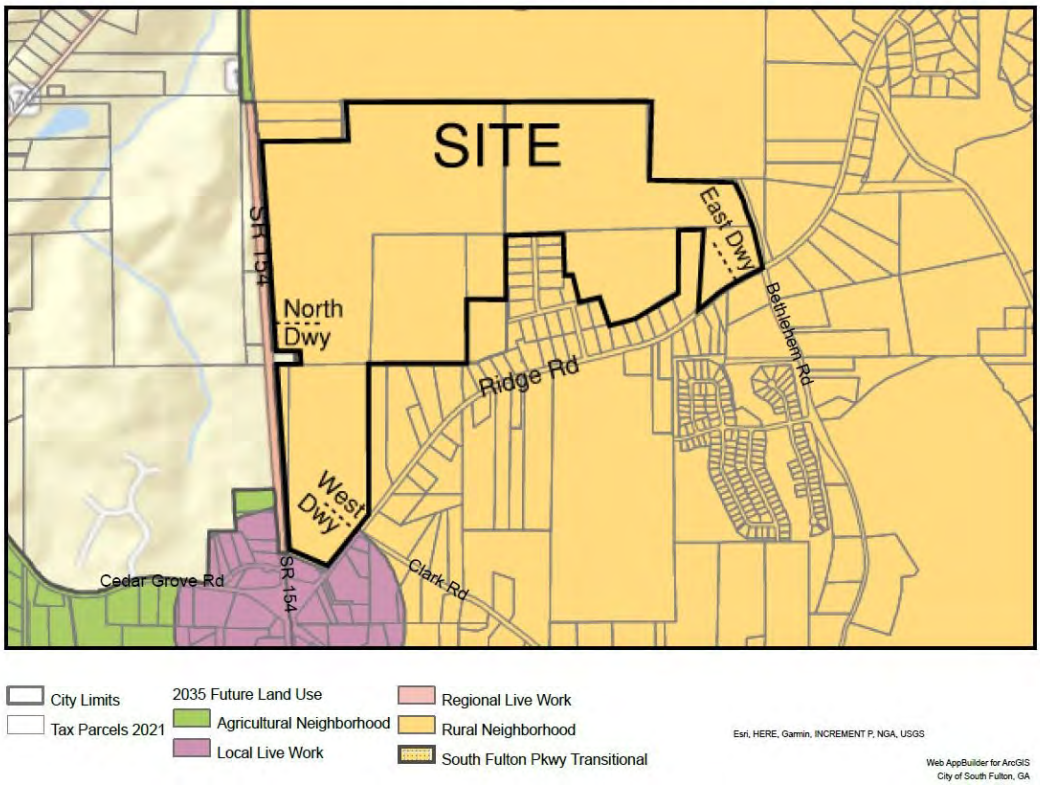
Consistency with Adopted Comprehensive Plan

The proposed development will consist of 643 dwelling units, including 491 single-family units and 152 townhomes. The property covers 327 acres of land, including 130 acres of open space. The site is currently zoned as Agricultural (AG-1) (301.337 acres) and Single-Family Dwelling (R-2A) (25.622 acres) and is requesting a rezoning to Community Unit Plan District (CUP) within the Cedar Grove Overlay District.

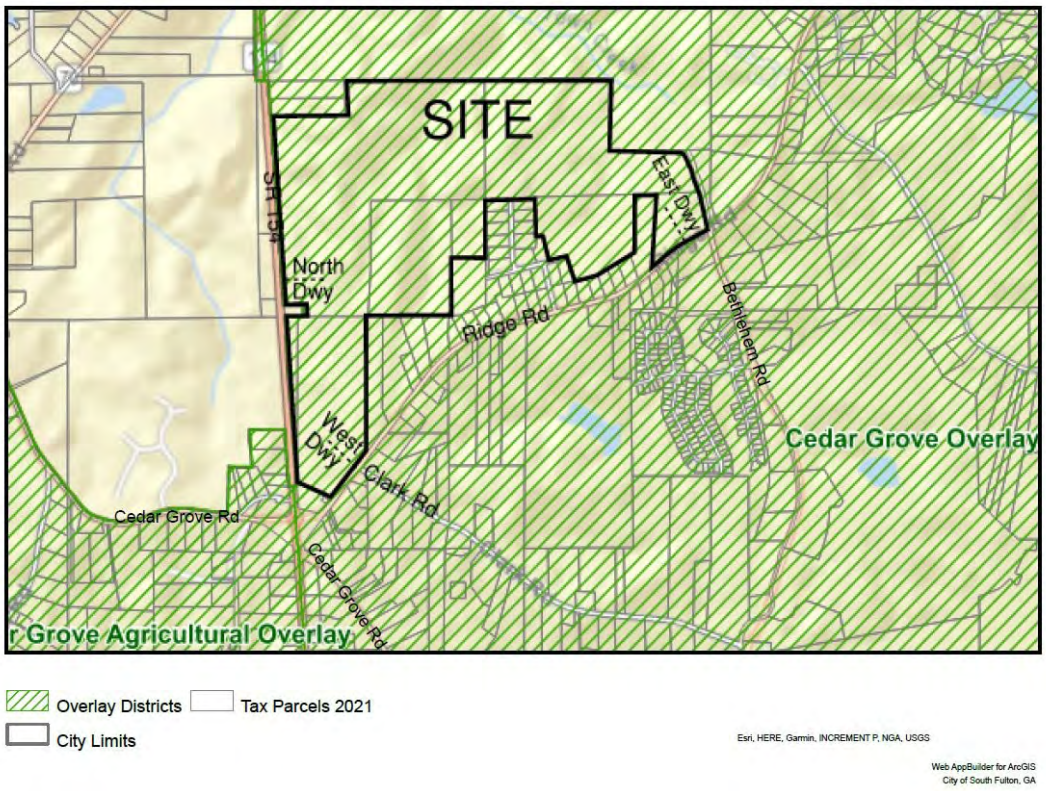
COSF Existing Zoning



COSF Future Land Use



COSF Overlay Districts

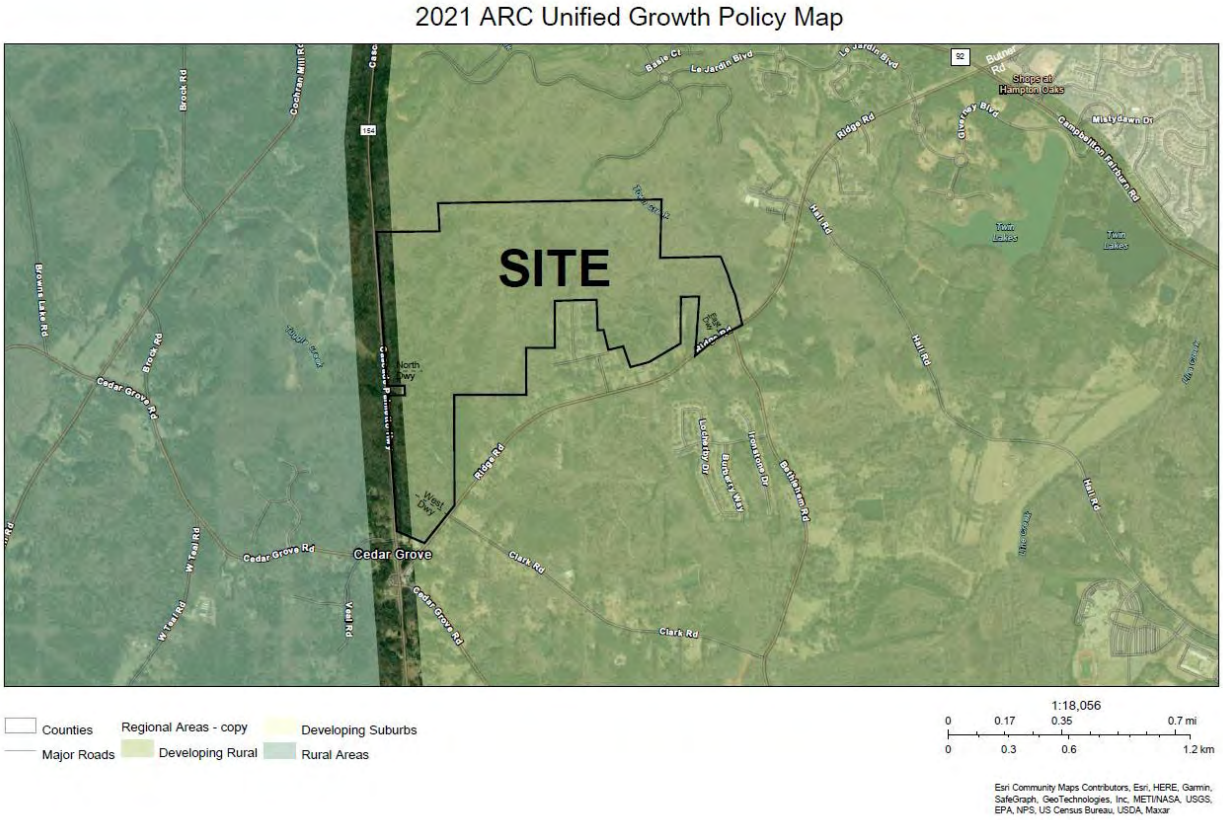


Future Land Use Map

City of South Fulton Future Land Use	Rural Neighborhood
Land Use Vision and Goals for the City of South Fulton	As per the 2021 Comprehensive Plan of the City of South Fulton, the South Fulton Community Vison is: • *City of South Fulton will be an innovative, diverse community that is safe, environmentally conscious, healthy, transparent and financially sustainable for all its citizens and visitors.* The goals to implement the above vision are: • *Ensure Stable Housing for All* • *Building Trust within the Community* • *Creating an Economic Engine for the South Side* • *Develop a Unique South Fulton* • *Develop a Strong Community for South Fulton* According to the City of South Fulton's Zoning Ordinance, the CUP District identifies land areas for a variety of housing types, including single-family and multi-family uses, within a planned community setting. The CUP District is intended to: • *Encourage the development of large tracts of land as planned communities* • *Encourage flexible and creative concepts in site planning.* • *Preserve the natural amenities of the land by encouraging scenic and functional open areas*

	• *Provide for an efficient use of land* • *Provide a stable residential environment compatible with surrounding residential areas* • *Protect neighboring properties by requiring larger peripheral lots adjacent to larger lot developments* The Cedar Grove Overlay District includes the area east of SR 154, west of SR 92, and approximately 0.5 miles north of South Fulton Parkway. The Cedar Grove Overlay District's purpose and intent is to establish a uniform procedure for providing for the protection, enhancement, preservation, unity of design, and use of places, sites, buildings, structures, streets, neighborhoods, and landscape features in the Cedar Grove Overlay District. The Cedar Grove Overlay District is part of a strategy designed to promote the health, safety, order, prosperity, and general welfare of the citizens of South Fulton through the regulation of design, aesthetics, location, bulk, size of buildings and structures, and the density and distribution of population. The Cedar Grove Overlay District seeks to: • *Reduce congestion on the streets* • *Provide safety from fire, flood, and other dangers* • *Provide adequate light and open space* • *Protect the natural environment* • *Address other public requirements, in order to provide sustainable development that involves the* • *simultaneous pursuit of economic prosperity, environmental protection, and social quality* • *Promote accepted design principles in areas of new development and redevelopment* • *Raise the level of community understanding and expectation for quality in the built environment* • *Protect and enhance local aesthetic and functional qualities* • *Stimulate business and promote economic development* In consideration of the rural character of the Cedar Grove Overlay District, the regulations are intended to: • *Define and monitor the suitability for certain uses, construction and design* • *Prevent functional and visual disunity* • *Promote desirable conditions for community and commerce* • *Protect property against blight and depreciation*
Relation to Existing Land Use Plans	The Project aligns with the Local Government's approved land use plan. *Single-Family Detached and Townhouses are allowed uses. A maximum of five single-family dwelling units (d.u.) per acre is allowed.* Common outdoor area consisting of not less than 550 square feet (s.f.) per unit shall be provided for recreation in all developments of 20 or more acres. Land area proposed for open space or recreation shall be allocated among the use areas in proportion to the ratio of a neighborhood population to the total CUP population so that acreage devoted to open space is reasonably accessible to all residents.

	The Project has 643 d.u. on a total of 327 acres, with 130 acres of open space. There will be 1.97 d.u. per acre, which satisfies the CUP District intention of a maximum of five single-family d.u. per acre. 130 acres is 5,662,800 s.f. There will be 8,807 s.f. of open space per d.u., which satisfies the CUP District intention of common outdoor area consisting of not less than 550 s.f. per unit. The acreage devoted to open space is reasonably accessible to all residents.



Project Phasing

This project has been evaluated for the complete build-out of the development in one phase in 2027.

Trip Generation

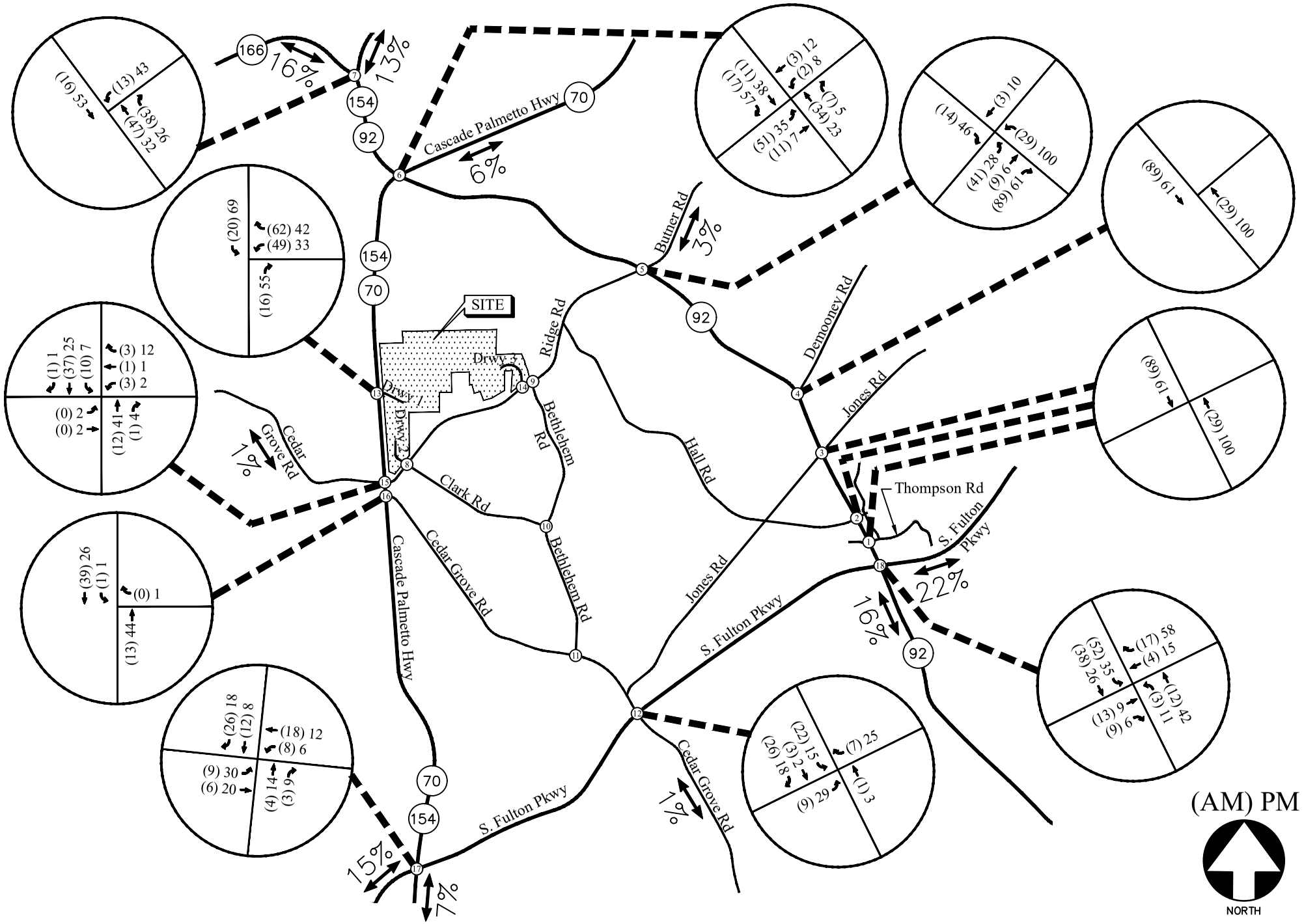
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE *Land Uses: 210 – Single-Family Detached Housing* and *215 – Single-Family Attached Housing*. The calculated total trip generation for the proposed development is shown in Table 4.

TABLE 4 – TRIP GENERATION (PROPOSED DEVELOPMENT)								
Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	2-way
ITE 210 – Single-Family Detached Housing	491 units	79	238	317	279	164	443	4,362
ITE 215 – Single-Family Attached Housing	152 units	18	55	73	51	36	87	1,108
Total Site Trips		97	293	390	330	200	530	5,470

Trip Distribution

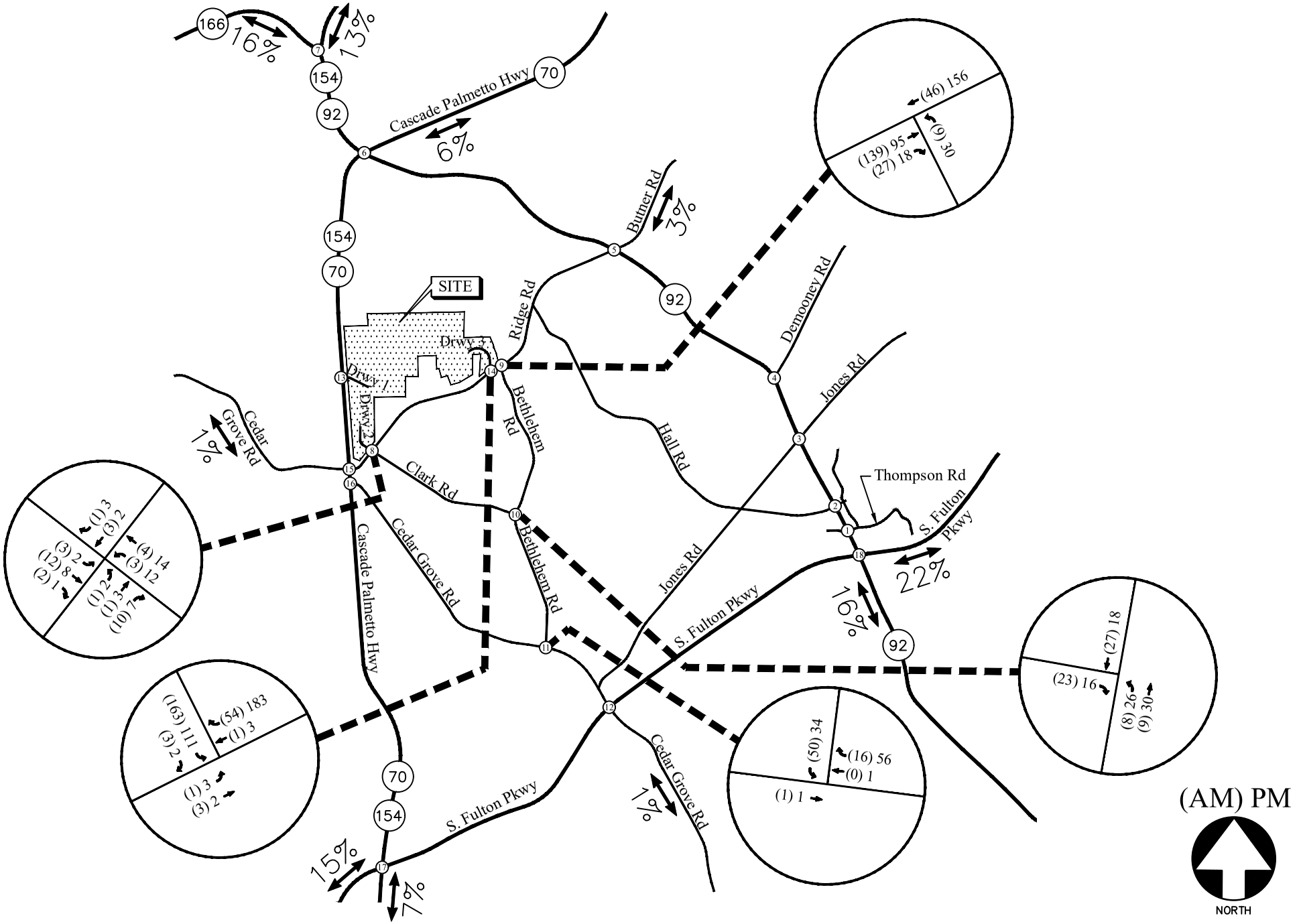
The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution as mentioned in the MMP and approved was used in the analysis and is shown below. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5A and Figure 5B.

Roadway	ARC ABM Year 2030 Vehicular Volume	Trip Distribution
SR 154 south of South Fulton Pkwy	9453	7%
SR 154 east of SR 92	7545	6%
Cedar Grove Rd North west of SR 154	1379	1%
Butner Rd east of SR 92	3957	3%
Cedar Grove Rd South south of South Fulton Pkwy	1913	1%
SR 92 south of South Fulton Pkwy	21476	16%
SR 92 north of SR 166	17068	13%
South Fulton Pkwy west of SR 154	19207	15%
South Fulton Pkwy east of SR 92	29492	22%
SR 166 west of SR 92	20835	16%
Total Entering/Exiting Study Area	132325	100%



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES (1 OF 2) FIGURE 5A

A&R Engineering Inc.



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES (2 OF 2) FIGURE 5B

A&R Engineering Inc.

FUTURE 2027 TRAFFIC ANALYSIS

The future 2027 traffic operations are analyzed for the "Build" and "No-Build" conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic.

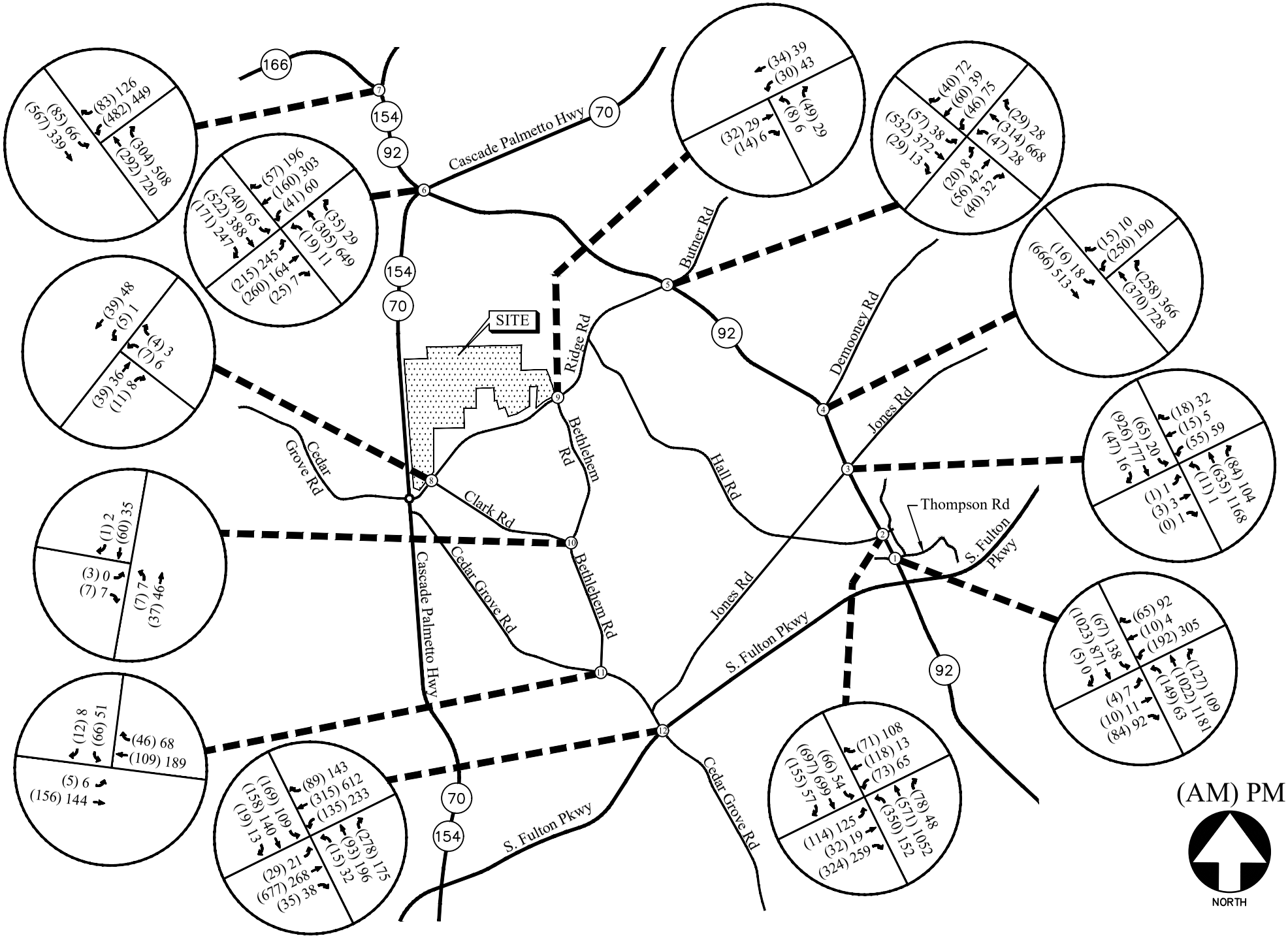
Improvements that are identified as "System Improvements" address deficiencies that are found within the existing road network prior to any impacts from the proposed development's added traffic. Improvements that are identified as "Site Mitigation Improvements" address further impacts that are a result of the proposed development's added traffic. Note that survey and construction drawings would be needed to verify the feasibility and extent of additional right-of-way required for any recommended improvements.

Future "No-Build" Conditions

The "No-Build" (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future "No-Build" volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of traffic and traffic from other nearby planned developments.

Annual Traffic Growth

In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. A growth rate of 2% as agreed in the methodology meeting was used in the analysis. This growth factor was applied to the existing traffic volumes to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future "No-Build" volumes on the roadway are shown in Figure 6.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 6

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Planned and Programmed Improvements in Study Area

The following improvements have been identified in the Regional Transportation Plan (Plan 2040), GDOT GEOPI, and/or the local comprehensive transportation plan. These improvements are within the vicinity of the proposed development.

Table 5 – Planned and Programmed Improvements

Item #	Project Name	From / To Points	Sponsor	GDOT PI #	ARC ID #	Design FY	ROW / UTL FY	CST FY
1	Greenway Trail from Boundary Waters Park to Sweetwater Creek Park	Boundary Waters Park to Sweetwater Creek Park	Douglas County	0012877	DO-298	2023	2025	2027
2	SR 14/SR 154 at Nine Locations and SR 154 at One Location in Fulton County	SR 154/Cascade Palmetto Highway at South Fulton Parkway is one of the intersections	GDOT	0013207	N/A	2014	2020	2023
3	SR 92 at SR 14 Alternate – CFI	Intersection of SR 92/Campbelton-Fairburn Rd and SR 14 Alternate/ South Fulton Parkway; Begin Project, tie into PI 0017398 approx. 1,580 ft north of Hall Rd; End Project, tie into existing approx. 1,760 ft south of SR 14 Alt	GDOT	0014081	FS-350	2023	2028	2030
4	SR 92 at CR 1374/Butner Road	Intersection of Ridge Road/Butner Road and SR 92	GDOT	0015593	N/A	2017	2022	2024
5	SR 92 at CR 515/Jones Road and at CR 485/Demooney Road	Intersections of SR 92 at CR 515/ Jones Road and at CR 485/ Demooney Road	GDOT	0017398	N/A	2021	2023	2024
6	Chattahoochee Hills Regional Greenway – Fulton	Cochran Mill Park to Phillips Road	Chattahoochee Hills	0009643	FS-209	Long Range – 2035		
7	Cascade-Palmetto Highway Widening	SR 92 (Campbelltown-Fairburn Road) to SR 154 (Campbellton Road)	GDOT	-	FS-011	Long Range – 2050		
8	South Fulton Parkway Corridor High Capacity Premium Transit Service	MARTA College Park Rail Station to SR 92	MARTA	-	AR-491A	Long Range – 2050		

GDOT PI 0015593 SR 92 at CR 1374/Butner Road – is the construction of a single lane roundabout with a 106-foot by 222-foot inscribed diameter at the intersection of Ridge Road/Butner Road and SR 92. The project is scheduled for construction in 2024.

GDOT PI 0015593 (SR 92 @ Ridge Road/Butner Road):

GDOT PI 0017398 SR 92 at CR 515/Jones Road and at CR 485/Demooney Road – is the construction of two roundabouts along SR 92/Campbellton Fairburn Road in Fulton County, Georgia: one at the intersection at Jones Road and the other at the intersection at Demooney Road. The total length of the project is 4,040 feet. The construction length at Jones Road is 1,842 feet, and the construction length at Demooney Road is 1,739 feet. Both roundabouts are proposed as multilane hybrid roundabouts. The number of roundabout lanes will be evaluated during design. The roundabouts are expected to reduce or eliminate the angle, head-on, and sideswipe-opposite direction crashes at the two subject intersections which account for 52% of total crashes. The project is scheduled for construction in 2024.

GDOT PI 0017398 (SR 92 @ Demooney Road):

GDOT PI 0017398 (SR 92 @ Jones Road):

Since both the above GDOT projects are scheduled for construction in 2024, the intersection of SR 92 at Ridge Road/Butner Road has been modeled as a single-lane roundabout, and the intersections of SR 92

at Jones Road and SR 92 at Demooney Road have been modeled as multi-lane roundabouts in both the "No-Build" and "Build" conditions analyses. The existing "2024" conditions analysis also included these improvements.

Nearby Planned Developments

There are 4 planned developments in the vicinity of the proposed site:

DRI #0552 Twin Lakes Community Development – proposed 2,370-unit residential subdivision with 1,430 single family units, 790 townhouse units and 150 loft apartment units, and 200,000 s.f. of retail space. This project is adjacent to the proposed development to the north and east.

DRI #2916 1908 Hall Road Union City – proposed 518-unit residential subdivision with 330 single family units and 188 townhouse units, and an 8,000 s.f. daycare facility, 1908 Hall Road Union City is bounded by Jones Road and Hall Road to the north and by South Fulton Parkway to the south.

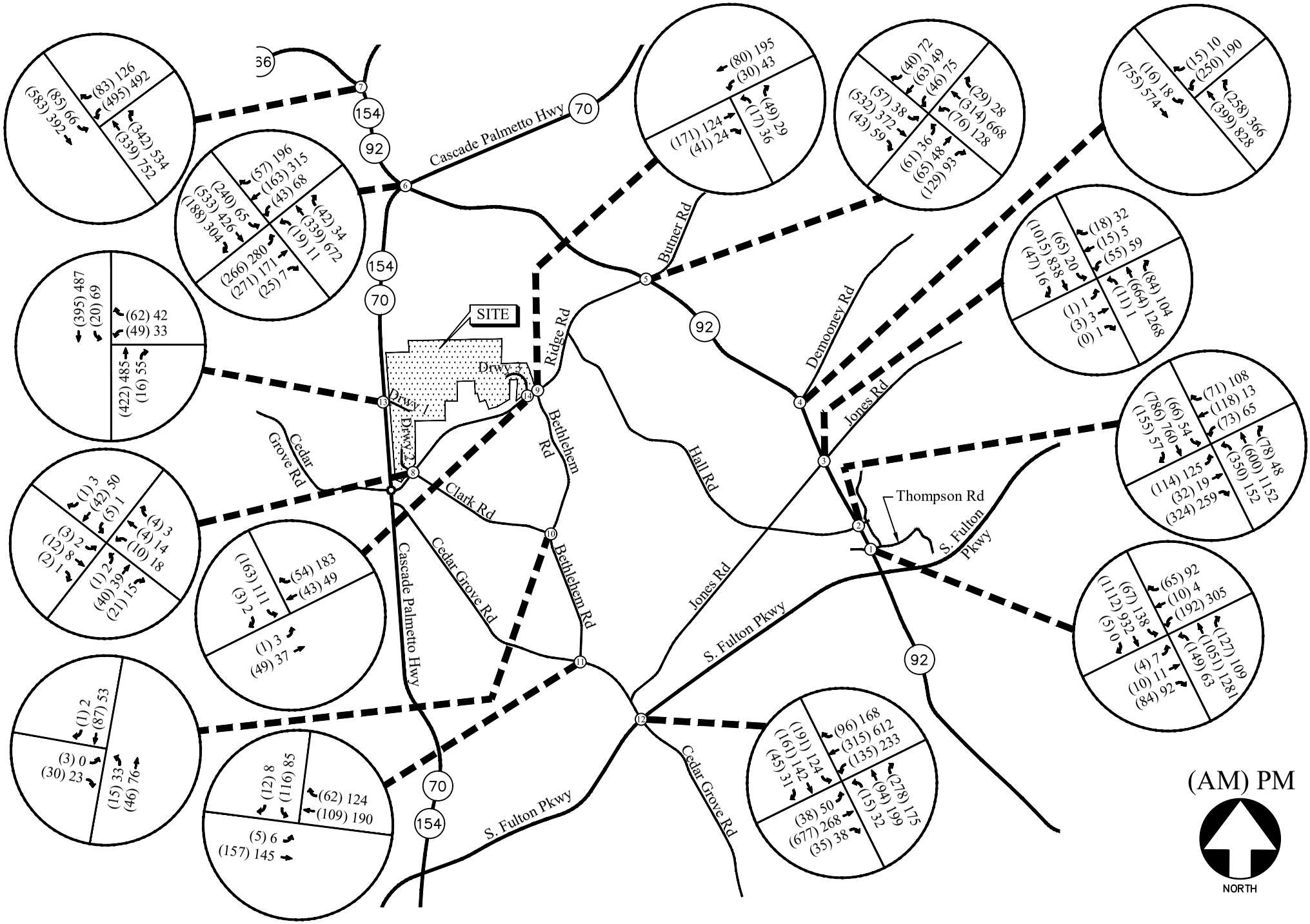
Since the above two DRI's have been constructed and their traffic is already included in the traffic counts, they were not considered in this traffic study.

DRI #3739 Cedar Grove Village Center – proposed mixed-use development with 16 single family detached units, 344 single family attached units, 436 multifamily units, 35,240 s.f. of office, 14,000 s.f. of strip retail plaza and 16,080 s.f. of fast casual restaurant, Cedar Grove Village Center will be located on the southeast corner of Cedar Grove Road and South Fulton Parkway. Since the build out year of this project is 2030 and the proposed development will be built by 2027, this site has not been considered in this traffic study.

DRI #4057 Westwood – proposed mixed-use development with 235 single family detached units, 226 single family attached units, 1,042 multifamily units, 154,100 s.f. of office, 221,720 s.f. of shopping center and 44,500 s.f. of supermarket, DRI #4057 will be located on the northwest corner of SR 154 and Cochran Road. Since the build out year of this project is 2032 and the proposed development will be built by 2027, this site has not been considered in this traffic study.

Future "Build" Conditions

The "Build" or development conditions include the estimated background traffic from the "No-Build" conditions plus the traffic from the proposed development. In order to evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) were added to base traffic volumes (Figure 6) to calculate the future traffic volumes after the construction of the development. These total future "Build" traffic volumes are shown in Figure 7.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 7

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Future Traffic Operations

The future "No-Build" and "Build" traffic operations were analyzed using the volumes in Figure 6 and Figure 7, respectively. The results of the future traffic operations analysis are shown below in Table 8.

TABLE 8 – FUTURE INTERSECTION OPERATIONS

	Intersection	LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**SR 92 @ Thompson Road**	**B (10.7)**	**B (18.3)**	**B (10.6)**	**B (19.2)**
	-Eastbound Approach	D (42.5)	C (33.7)	D (42.5)	C (33.8)
	-Westbound Approach	D (53.0)	D (52.8)	D (53.0)	D (53.3)
	-Northbound Approach	B (10.6)	B (20.0)	B (10.8)	C (21.3)
	-Southbound Approach	A (2.6)	A (5.3)	A (2.8)	A (6.4)
2	**SR 92 @ Hall Road**	**B (18.9)**	**B (11.4)**	**C (21.5)**	**B (12.4)**
	-Eastbound Approach	D (53.1)	D (54.5)	D (53.1)	D (54.5)
	-Westbound Approach	D (50.0)	D (49.7)	D (50.0)	D (49.7)
	-Northbound Approach	A (6.9)	A (3.9)	B (10.5)	A (5.6)
	-Southbound Approach	B (19.0)	B (11.1)	C (21.8)	B (12.2)
3	**SR 92 @ Jones Road**	**A (6.4)**	**A (7.3)**	**A (6.8)**	**A (7.8)**
	-Eastbound Approach	A (6.5)	A (5.7)	A (7.1)	A (6.0)
	-Westbound Approach	A (5.7)	B (10.3)	A (5.8)	B (11.6)
	-Northbound Approach	A (5.5)	A (7.9)	A (5.7)	A (8.6)
	-Southbound Approach	A (7.1)	A (6.0)	A (7.6)	A (6.3)
4	**SR 92 @ Demooney Road**	**A (6.0)**	**A (6.6)**	**A (6.4)**	**A (7.2)**
	-Westbound Approach	A (6.4)	A (8.5)	A (6.7)	A (9.6)
	-Northbound Approach	A (4.9)	A (6.9)	A (5.0)	A (7.4)
	-Southbound Approach	A (6.9)	A (5.4)	A (7.5)	A (5.8)
5	**SR 92 @ Ridge Road / Butner Road**	**A (8.1)**	**A (8.9)**	**A (6.9)**	**A (7.7)**
	-Eastbound Approach	A (7.6)	A (5.5)	A (7.6)	A (5.5)
	-Westbound Approach	A (5.8)	A (9.9)	A (5.0)	A (8.0)
	-Northbound Approach	A (6.3)	B (10.2)	A (5.4)	A (8.7)
	-Southbound Approach	A (9.9)	A (6.9)	A (8.1)	A (6.5)
6	**SR 92 @ SR 154**	**C (33.7)**	**E (58.7)**	**D (38.3)**	**E (67.6)**
	-Eastbound Approach	D (49.5)	D (52.8)	D (54.6)	E (77.3)
	-Westbound Approach	D (54.6)	E (76.5)	E (65.3)	F (81.0)
	-Northbound Approach	C (23.7)	E (66.0)	C (26.7)	E (74.6)
	-Southbound Approach	C (20.5)	C (31.7)	C (22.6)	C (33.1)
7	**SR 92/SR 154 @ SR 166**	**A (6.4)**	**A (7.2)**	**A (6.6)**	**A (7.9)**
	-Westbound Approach	A (6.8)	B (11.2)	A (7.3)	B (12.5)
	-Northbound Approach	A (2.6)	A (5.6)	A (2.9)	A (5.9)
	-Southbound Approach	A (9.4)	A (6.5)	A (9.8)	A (7.2)
8	**Ridge Road @ Clark Road / Site Driveway 2 (Western)**				
	-Eastbound Approach	-	-	A (9.7)	A (9.6)
	-Westbound Approach	A (8.9)	A (9.0)	A (9.4)	A (9.6)
	-Northbound Left	-	-	A (7.3)	A (7.3)
	-Southbound Left	A (7.3)	A (7.3)	A (7.4)	A (7.3)

9	**Ridge Road @ Bethlehem Road** -Westbound Left -Northbound Approach	 A (7.4) A (9.0)	 A (7.4) A (8.8)	 A (7.9) B (10.7)	 A (7.6) B (11.1)
10	**Bethlehem Road @ Clark Road** -Eastbound Approach -Northbound Left	 A (9.0) A (7.4)	 A (8.6) A (7.3)	 A (9.1) A (7.5)	 A (8.8) A (7.4)
11	**Cedar Grove Road @ Bethlehem Road** -Eastbound Left -Southbound Approach	 A (7.6) B (11.2)	 A (7.8) B (11.6)	 A (7.6) B (12.1)	 A (7.9) B (12.5)
12	**South Fulton Parkway @ Cedar Grove Road** -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	**D (35.1)** C (31.6) C (23.4) D (54.4) D (35.9)	**C (29.8)** C (22.6) B (19.2) D (54.0) C (34.7)	**D (36.6)** C (31.6) C (23.7) D (54.4) D (42.9)	**C (30.6)** C (23.0) C (20.6) D (54.1) C (34.9)
13	**SR 154 @ Site Driveway 1** -Westbound Approach -Southbound Left	 -	 -	 C (17.5) A (8.4)	 C (21.6) A (8.9)
14	**Ridge Road @ Site Driveway 3 (Eastern)** -Eastbound Left -Southbound Approach	 -	 -	 A (7.4) B (10.0)	 A (7.7) A (9.6)

The results of the "No-Build" traffic operations show that the signalized study intersection of SR 92 at SR 154 will operate at an overall level-of-service "E" in the PM peak hour with the westbound and northbound approaches operating with LOS "E" in PM peak hour.

Results of "Build" conditions traffic operations show that the intersection of SR 92 and SR 154 will continue to operate at level of service "E" as in "No-Build" conditions with some additional delays. The eastbound and northbound approaches will operate at level of service "E" and the westbound approach will operate at level of service "F" in the PM peak hour. All other study intersections will operate satisfactorily.

Recommendations for System Improvements

The results of the "No-Build" traffic operations show that the signalized study intersection of SR 92 at SR 154 will operate at an overall level-of-service "E" in the PM peak hour with the westbound and northbound approaches operating with LOS "E" in PM peak hour.

- Addition of a right turn lane on the westbound approach (Cascade Palmetto Highway/SR 70)

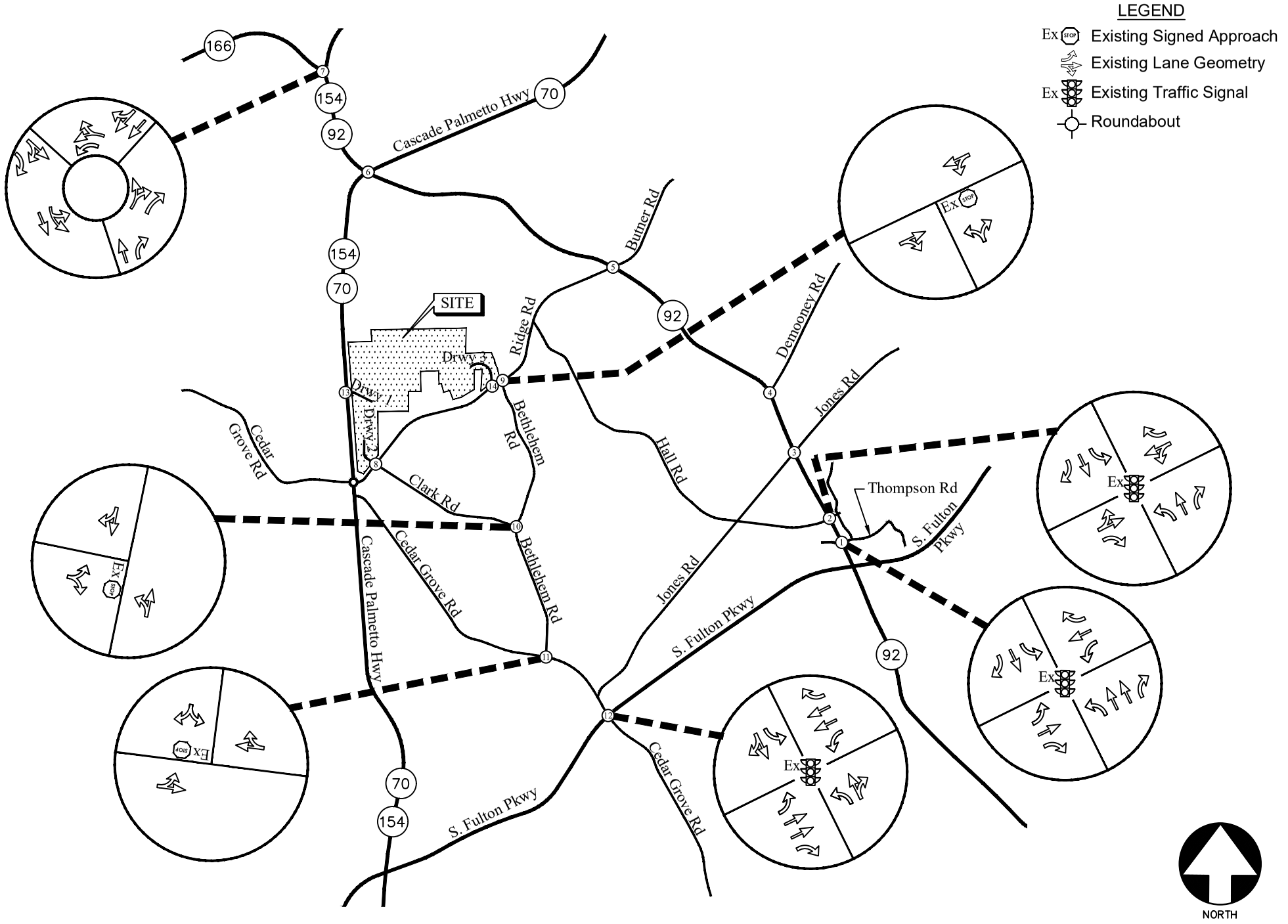
The results of the future traffic operations after the system improvements are implemented are shown below in Table 9.

TABLE 9 – FUTURE INTERSECTION OPERATIONS WITH SYSTEM IMPROVEMENTS

Intersection		LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
6	**SR 92 @ SR 154**	**C (32.5)**	**D (38.3)**	**C (34.8)**	**D (41.4)**
	-Eastbound Approach	D (50.0)	D (42.5)	D (52.6)	D (49.0)
	-Westbound Approach	D (54.8)	D (53.9)	D (54.6)	D (53.9)
	-Northbound Approach	C (21.3)	C (33.6)	C (23.8)	D (38.0)
	-Southbound Approach	B (18.3)	C (21.9)	C (20.1)	C (24.1)

After the recommended system improvements are implemented, the intersection of SR 92 at SR 154 will operate at LOS "D" or better in both the AM and PM peak hours.

Recommendations for future traffic control and lane geometry are shown in Figure 8A and Figure 8B.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY 1 OF 2

FIGURE 8A

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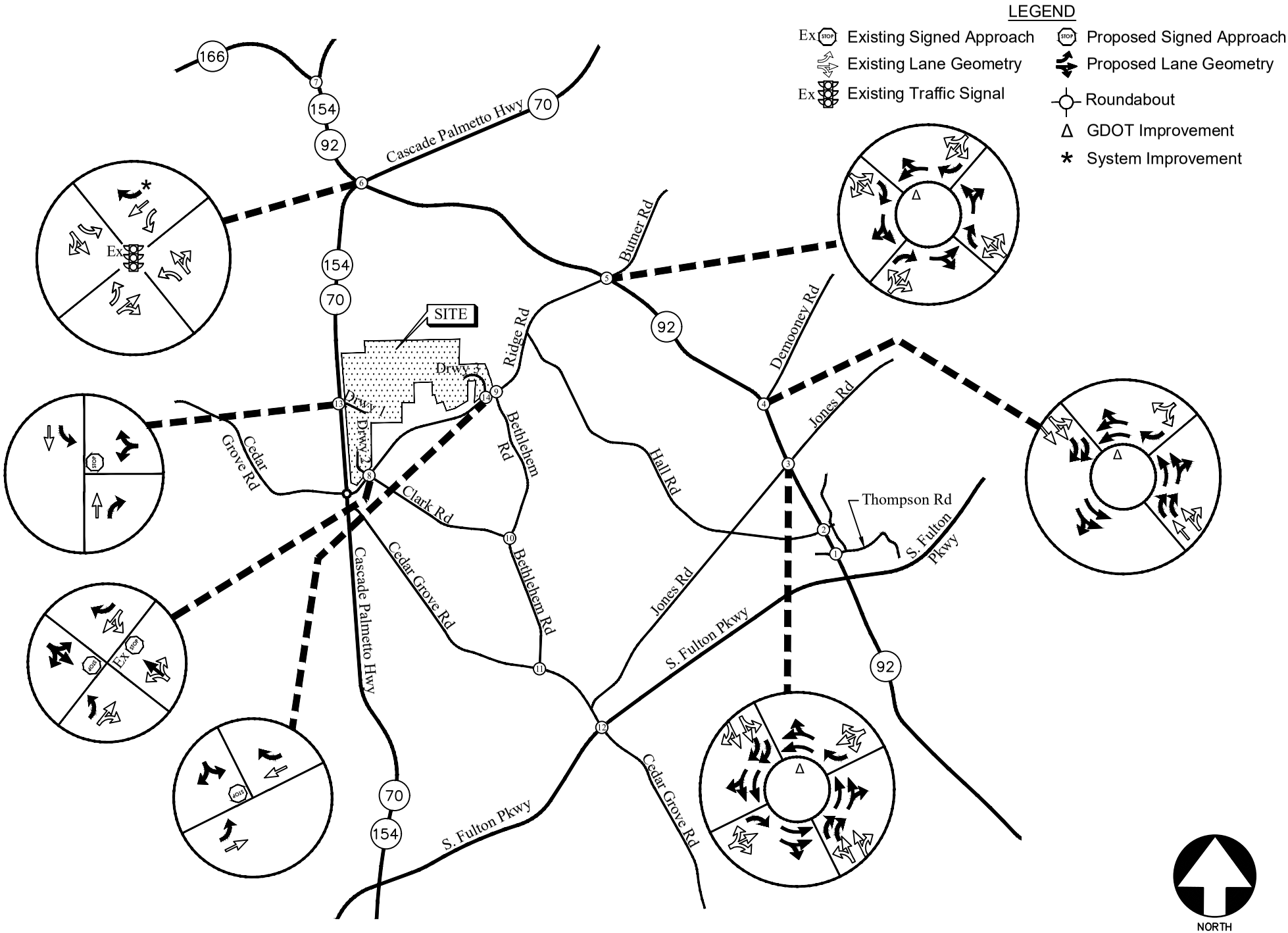

FUTURE TRAFFIC CONTROL AND LANE GEOMETRY 2 OF 2

FIGURE 8B

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CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed residential development that will be located to the northeast of the intersection of SR 154 and Cedar Grove Road / Ridge Road in the City of South Fulton, Georgia. The development will consist of:

- Single-Family Detached Housing: 491 units
- Townhomes: 152 units

The development proposes access at the following locations:

- Site Driveway 1: Full access driveway on SR 154
- Site Driveway 2: Full access (western) driveway on Ridge Road, aligned with Clark Road
- Site Driveway 3: Full access (eastern) driveway on Ridge Road, west of Bethlehem Road

Existing and future traffic operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. SR 92 @ Thompson Road
2. SR 92 @ Hall Road
3. SR 92 @ Jones Road
4. SR 92 @ Demooney Road
5. SR 92 @ Ridge Road / Butner Road
6. SR 92 @ SR 154
7. SR 92/SR 154 @ SR 166
8. Ridge Road @ Clark Road / Site Driveway 2 (Western)
9. Ridge Road @ Bethlehem Road
10. Bethlehem Road @ Clark Road
11. Cedar Grove Road @ Bethlehem Road
12. South Fulton Parkway @ Cedar Grove Road
13. SR 154 @ Site Driveway 1
14. Ridge Road @ Site Driveway 3 (Eastern)

The analysis included the evaluation of Future operations for “No-Build” and “Build” conditions, both of which account for increases in annual growth of through traffic.

The results of the “No-Build” traffic operations show that the signalized study intersection of SR 92 at SR 154 will operate at an overall level-of-service “E” in the PM peak hour with the eastbound and westbound approaches operating with LOS “E” and “F” in both peak hours.

Results of “Build” conditions traffic operations show that the intersection of SR 92 and SR 154 will continue to operate at an unsatisfactory level of service as in “No-Build” conditions with some additional delays. All other study intersections will operate satisfactorily.

Recommendations for System Improvements

A summary of the system improvements, which address deficiencies that are found within the existing road network for the "No-Build" conditions, is provided below.

Intersection 6: SR 92 @ SR 154

- Addition of a right turn lane on the westbound approach (Cascade Palmetto Highway/SR 70)

After the recommended system improvements are implemented, the intersection of SR 92 at SR 154 will operate at LOS "D" or better in both the AM and PM peak hours.

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections:

- Site Driveway 1: Full access driveway on SR 154
  - One entering and one exiting lane.
  - Stop-sign controlled on the driveway approach with SR 154 remaining free flow.
  - Left Turn Lane and Right Turn Lane on SR 154 for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

- Site Driveway 2: Full access (western) driveway on Ridge Road, aligned with Clark Road
  - One entering and one exiting lane.
  - Stop-sign controlled on the driveway and Clark Road approaches.
  - Left Turn Lane and Right Turn Lane on Ridge Road for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

- Site Driveway 3: Full access (eastern) driveway on Ridge Road
  - One entering and one exiting lane.
  - Stop-sign controlled on the driveway approach with Ridge Road remaining free flow.
  - Left Turn Lane and Right Turn Lane on Ridge Road for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

Appendix

Existing Intersection Traffic Counts

A&R Engeneering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
SR 154-SR 70 (Cascade Palmetto Hwy) @
Cedar Grove Rd - Ridge Rd
7-9 am | 4-6 pm

File Name : 20230266
Site Code : 20230266
Start Date : 08-15-2023
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 154-SR 70 (Cascade Palmetto Hwy) Northbound				SR 154-SR 70 (Cascade Palmetto Hwy) Southbound				Cedar Grove Rd Eastbound				Ridge Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	74	2	78	1	71	0	72	1	0	13	14	3	0	6	9	173
07:15 AM	0	87	7	94	3	79	0	82	3	0	5	8	5	2	5	12	196
07:30 AM	2	109	4	115	1	84	1	86	2	3	8	13	5	2	2	9	223
07:45 AM	3	94	1	98	1	85	1	87	2	1	11	14	8	10	5	23	222
Total	7	364	14	385	6	319	2	327	8	4	37	49	21	14	18	53	814
08:00 AM	5	98	7	110	3	94	2	99	0	4	5	9	3	3	3	9	227
08:15 AM	7	79	1	87	1	97	3	101	0	3	2	5	5	1	4	10	203
08:30 AM	1	74	3	78	2	75	0	77	2	5	5	12	5	0	1	6	173
08:45 AM	4	58	3	65	3	56	1	60	1	0	2	3	2	3	2	7	135
Total	17	309	14	340	9	322	6	337	3	12	14	29	15	7	10	32	738
*** BREAK ***																	
04:00 PM	10	97	5	112	5	112	0	117	0	5	6	11	5	1	2	8	248
04:15 PM	8	91	8	107	1	119	0	120	1	0	9	10	11	0	3	14	251
04:30 PM	7	103	7	117	3	112	1	116	1	2	4	7	8	4	4	16	256
04:45 PM	7	115	7	129	3	90	1	94	2	1	4	7	10	0	5	15	245
Total	32	406	27	465	12	433	2	447	4	8	23	35	34	5	14	53	1000
05:00 PM	3	114	9	126	0	116	1	117	0	2	4	6	5	0	3	8	257
05:15 PM	5	114	5	124	5	116	0	121	1	2	10	13	7	7	2	16	274
05:30 PM	8	100	8	116	6	119	2	127	0	3	6	9	9	0	2	11	263
05:45 PM	11	96	5	112	4	94	2	100	0	0	5	5	9	7	1	17	234
Total	27	424	27	478	15	445	5	465	1	7	25	33	30	14	8	52	1028
Grand Total	83	1503	82	1668	42	1519	15	1576	16	31	99	146	100	40	50	190	3580
Apprch %	5	90.1	4.9		2.7	96.4	1		11	21.2	67.8		52.6	21.1	26.3		
Total %	2.3	42	2.3	46.6	1.2	42.4	0.4	44	0.4	0.9	2.8	4.1	2.8	1.1	1.4	5.3	
Cars & Buses	78	1350	80	1508	41	1350	14	1405	15	30	97	142	100	39	49	188	3243
% Cars & Buses	94	89.8	97.6	90.4	97.6	88.9	93.3	89.1	93.8	96.8	98	97.3	100	97.5	98	98.9	90.6
Trucks	5	153	2	160	1	169	1	171	1	1	2	4	0	1	1	2	337
% Trucks	6	10.2	2.4	9.6	2.4	11.1	6.7	10.9	6.2	3.2	2	2.7	0	2.5	2	1.1	9.4

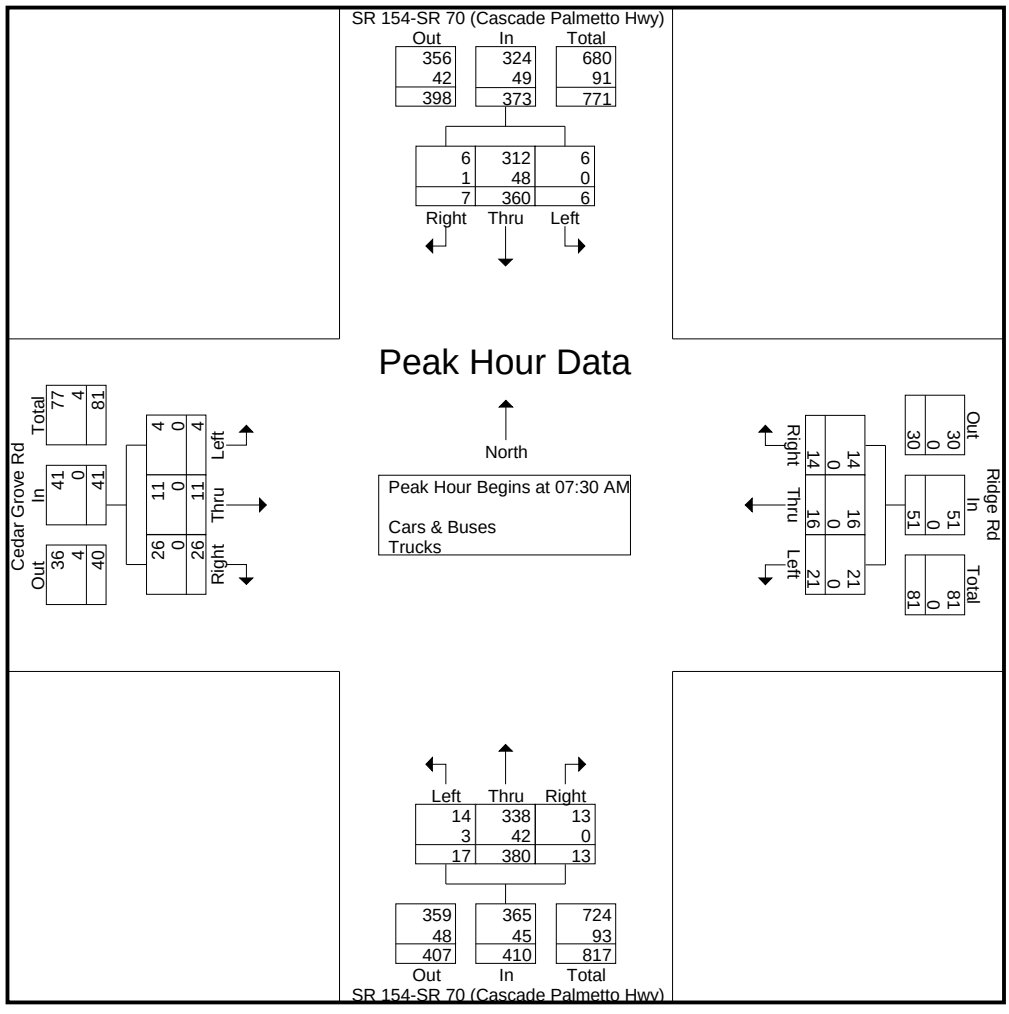
A&R Engeneering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
SR 154-SR 70 (Cascade Palmetto Hwy) @
Cedar Grove Rd - Ridge Rd
7-9 am | 4-6 pm

File Name : 20230266
Site Code : 20230266
Start Date : 08-15-2023
Page No : 2

	SR 154-SR 70 (Cascade Palmetto Hwy) Northbound				SR 154-SR 70 (Cascade Palmetto Hwy) Southbound				Cedar Grove Rd Eastbound				Ridge Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	**109**	4	**115**	1	84	1	86	**2**	3	8	13	5	2	2	9	223
07:45 AM	3	94	1	98	1	85	1	87	2	1	**11**	**14**	**8**	**10**	**5**	**23**	222
08:00 AM	5	98	**7**	110	**3**	94	2	99	0	**4**	5	9	3	3	3	9	**227**
08:15 AM	**7**	79	1	87	1	**97**	**3**	**101**	0	3	2	5	5	1	4	10	203
Total Volume	17	380	13	410	6	360	7	373	4	11	26	41	21	16	14	51	875
% App. Total	4.1	92.7	3.2		1.6	96.5	1.9		9.8	26.8	63.4		41.2	31.4	27.5		
PHF	.607	.872	.464	.891	.500	.928	.583	.923	.500	.688	.591	.732	.656	.400	.700	.554	.964
Cars & Buses	14	338	13	365	6	312	6	324	4	11	26	41	21	16	14	51	781
% Cars & Buses	82.4	88.9	100	89.0	100	86.7	85.7	86.9	100	100	100	100	100	100	100	100	89.3
Trucks	3	42	0	45	0	48	1	49	0	0	0	0	0	0	0	0	94
% Trucks	17.6	11.1	0	11.0	0	13.3	14.3	13.1	0	0	0	0	0	0	0	0	10.7



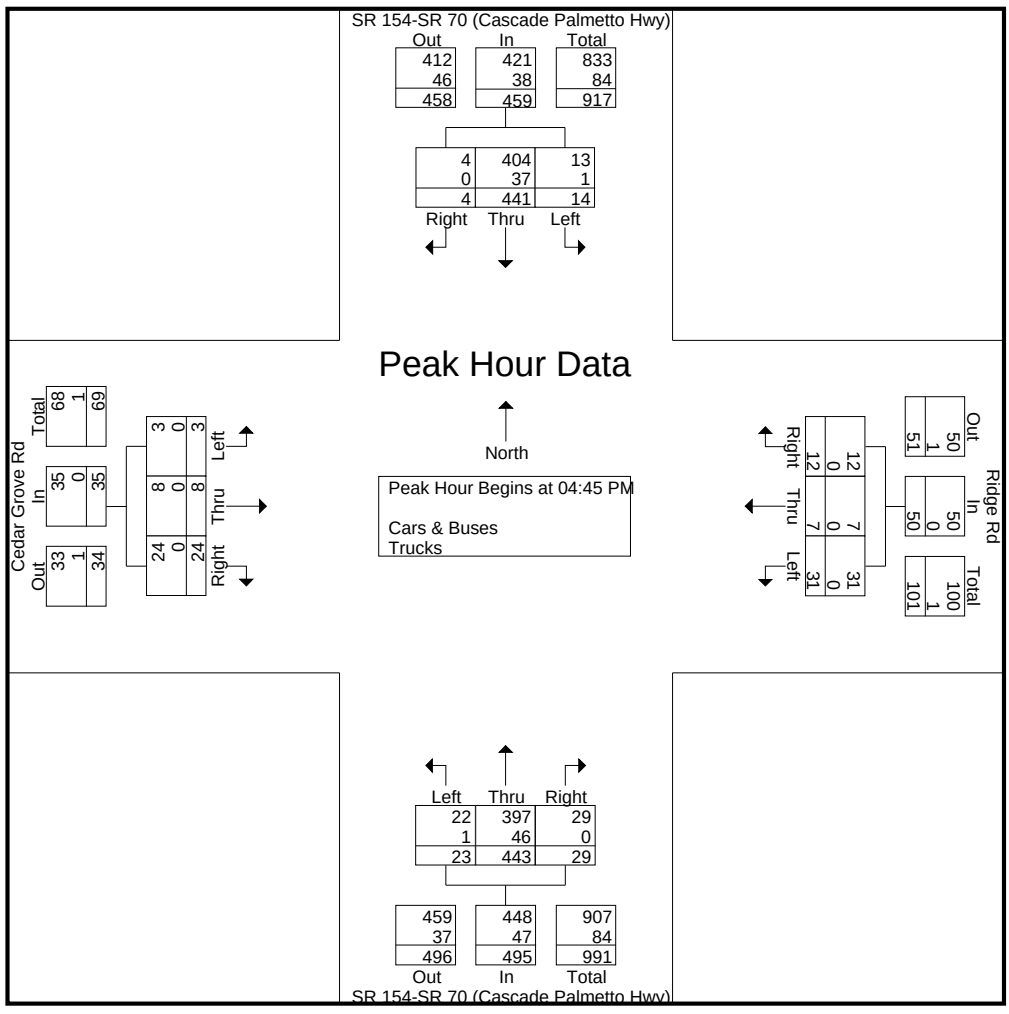
A&R Engeneering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
SR 154-SR 70 (Cascade Palmetto Hwy) @
Cedar Grove Rd - Ridge Rd
7-9 am | 4-6 pm

File Name : 20230266
Site Code : 20230266
Start Date : 08-15-2023
Page No : 3

	SR 154-SR 70 (Cascade Palmetto Hwy) Northbound				SR 154-SR 70 (Cascade Palmetto Hwy) Southbound				Cedar Grove Rd Eastbound				Ridge Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	7	**115**	7	**129**	3	90	1	94	**2**	1	4	7	**10**	0	**5**	15	245
05:00 PM	3	114	**9**	126	0	116	1	117	0	2	4	6	5	0	3	8	257
05:15 PM	5	114	5	124	5	116	0	121	1	2	**10**	**13**	7	**7**	2	**16**	**274**
05:30 PM	**8**	100	8	116	**6**	**119**	**2**	**127**	0	**3**	6	9	9	0	2	11	263
Total Volume	23	443	29	495	14	441	4	459	3	8	24	35	31	7	12	50	1039
% App. Total	4.6	89.5	5.9		3.1	96.1	0.9		8.6	22.9	68.6		62	14	24		
PHF	.719	.963	.806	.959	.583	.926	.500	.904	.375	.667	.600	.673	.775	.250	.600	.781	.948
Cars & Buses	22	397	29	448	13	404	4	421	3	8	24	35	31	7	12	50	954
% Cars & Buses	95.7	89.6	100	90.5	92.9	91.6	100	91.7	100	100	100	100	100	100	100	100	91.8
Trucks	1	46	0	47	1	37	0	38	0	0	0	0	0	0	0	0	85
% Trucks	4.3	10.4	0	9.5	7.1	8.4	0	8.3	0	0	0	0	0	0	0	0	8.2



735 Maryland St
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File Name : Cedar Grove Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Bethlehem Rd Southbound				Cedar Grove Rd Westbound				Northbound				Cedar Grove Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	15	0	0	0	0	29	6	0	0	0	0	0	0	19	0	0	69
07:15	16	0	4	0	0	21	6	0	0	0	0	0	1	35	0	0	83
07:30	18	0	2	0	0	21	15	0	0	0	0	0	2	37	0	0	95
07:45	15	0	4	0	0	33	11	0	0	0	0	0	0	46	0	0	109
Total	64	0	10	0	0	104	38	0	0	0	0	0	3	137	0	0	356
08:00	13	0	1	0	0	28	11	0	0	0	0	0	2	29	0	0	84
08:15	18	0	1	0	0	25	3	0	0	0	0	0	1	27	0	0	75
08:30	19	0	0	0	0	22	10	0	0	0	0	0	0	23	0	0	74
08:45	12	0	0	0	0	21	4	0	0	0	0	0	1	25	0	0	63
Total	62	0	2	0	0	96	28	0	0	0	0	0	4	104	0	0	296
16:00	11	0	2	0	0	54	16	0	0	0	0	0	2	32	0	0	117
16:15	10	0	2	0	0	48	16	0	0	0	0	0	0	31	0	0	107
16:30	12	0	2	0	0	41	16	0	0	0	0	0	3	45	0	0	119
16:45	15	0	2	0	0	35	16	0	0	0	0	0	1	28	0	0	97
Total	48	0	8	0	0	178	64	0	0	0	0	0	6	136	0	0	440
17:00	7	0	0	0	0	58	16	0	0	0	0	0	1	30	0	0	112
17:15	7	0	3	0	0	44	19	0	0	0	0	0	0	39	0	0	112
17:30	16	0	3	0	0	44	16	0	0	0	0	0	3	37	0	0	119
17:45	6	0	1	0	0	38	15	0	0	0	0	0	4	27	0	0	91
Total	36	0	7	0	0	184	66	0	0	0	0	0	8	133	0	0	434
Grand Total	210	0	27	0	0	562	196	0	0	0	0	0	21	510	0	0	1526
Apprch %	88.6	0	11.4	0	0	74.1	25.9	0	0	0	0	0	4	96	0	0	
Total %	13.8	0	1.8	0	0	36.8	12.8	0	0	0	0	0	1.4	33.4	0	0	
Passenger Vehicles	205	0	27	0	0	548	191	0	0	0	0	0	19	500	0	0	1490
% Passenger Vehicles	97.6	0	100	0	0	97.5	97.4	0	0	0	0	0	90.5	98	0	0	97.6
Heavy Vehicles	1	0	0	0	0	13	2	0	0	0	0	0	2	9	0	0	27
% Heavy Vehicles	0.5	0	0	0	0	2.3	1	0	0	0	0	0	9.5	1.8	0	0	1.8
Buses	4	0	0	0	0	1	3	0	0	0	0	0	0	1	0	0	9
% Buses	1.9	0	0	0	0	0.2	1.5	0	0	0	0	0	0	0.2	0	0	0.6

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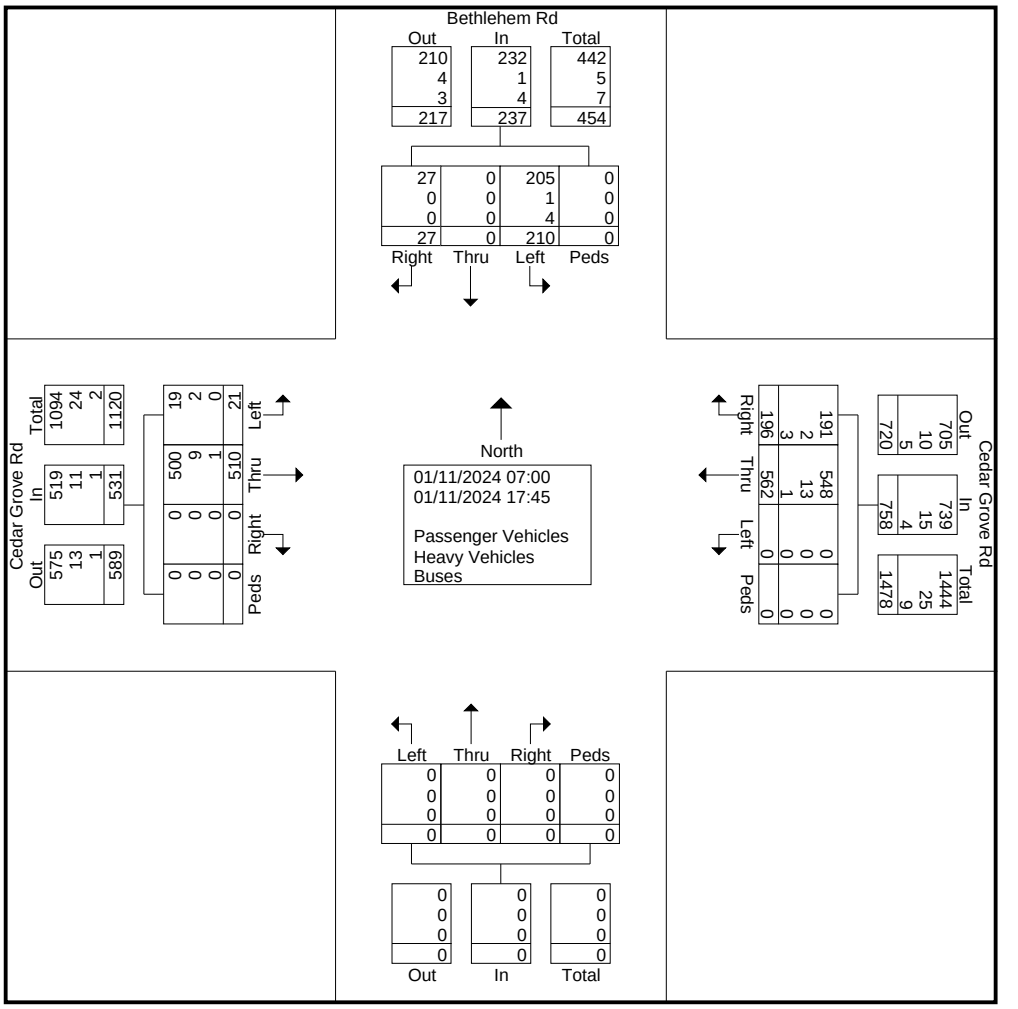
File Name : Cedar Grove Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 2



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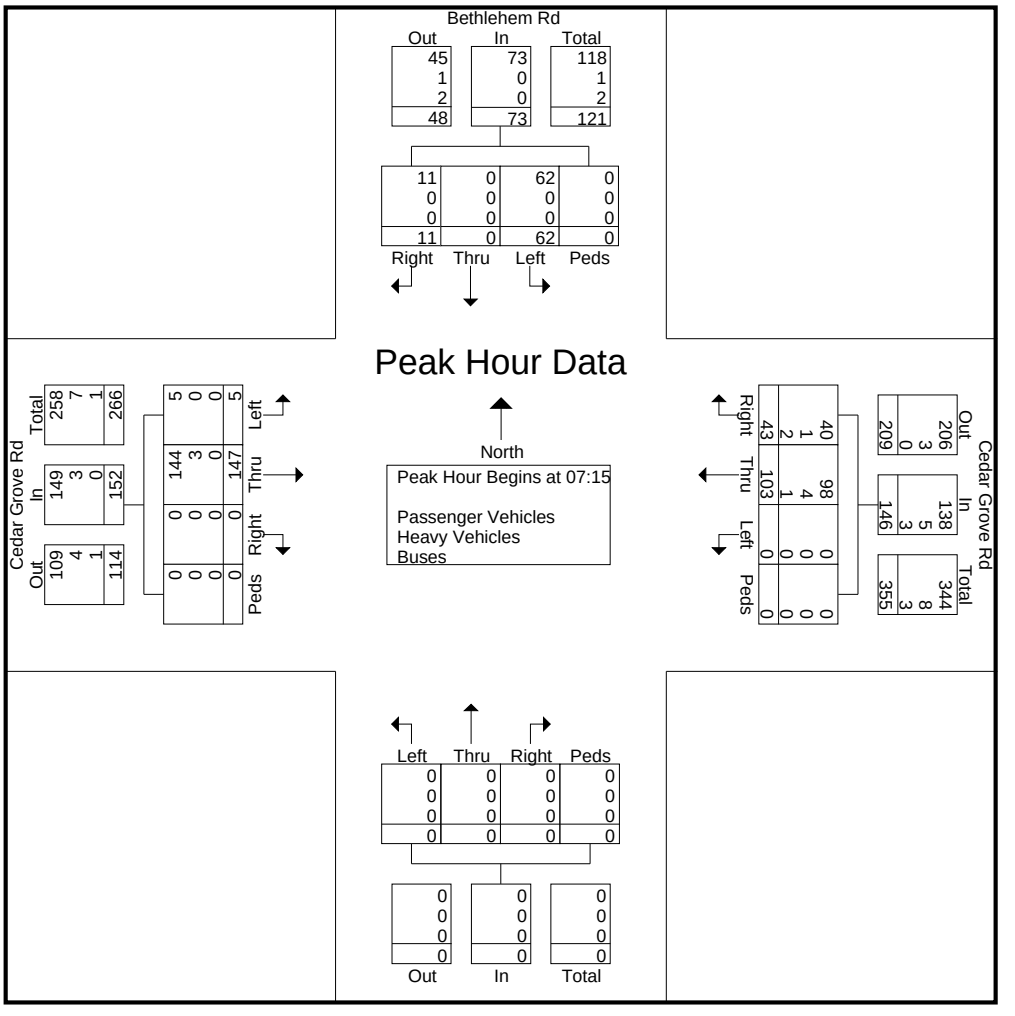
File Name : Cedar Grove Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 3

	Bethlehem Rd Southbound					Cedar Grove Rd Westbound					Northbound					Cedar Grove Rd Eastbound					
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 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	16	0	**4**	0	**20**	0	21	6	0	27	0	0	0	0	0	1	35	0	0	36	83
07:30	**18**	0	2	0	20	0	21	**15**	0	36	0	0	0	0	0	**2**	37	0	0	39	95
07:45	15	0	4	0	19	0	**33**	11	0	**44**	0	0	0	0	0	0	**46**	0	0	**46**	**109**
08:00	13	0	1	0	14	0	28	11	0	39	0	0	0	0	0	2	29	0	0	31	84
Total Volume	62	0	11	0	73	0	103	43	0	146	0	0	0	0	0	5	147	0	0	152	371
% App. Total	84.9	0	15.1	0		0	70.5	29.5	0		0	0	0	0		3.3	96.7	0	0		
PHF	.861	.000	.688	.000	.913	.000	.780	.717	.000	.830	.000	.000	.000	.000	.000	.625	.799	.000	.000	.826	.851
Passenger Vehicles	62	0	11	0	73	0	98	40	0	138	0	0	0	0	0	5	144	0	0	149	360
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	3	0	0	3	8
% Heavy Vehicles	0	0	0	0	0	0	3.9	2.3	0	3.4	0	0	0	0	0	0	2.0	0	0	2.0	2.2
Buses	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	3
% Buses	0	0	0	0	0	0	1.0	4.7	0	2.1	0	0	0	0	0	0	0	0	0	0	0.8



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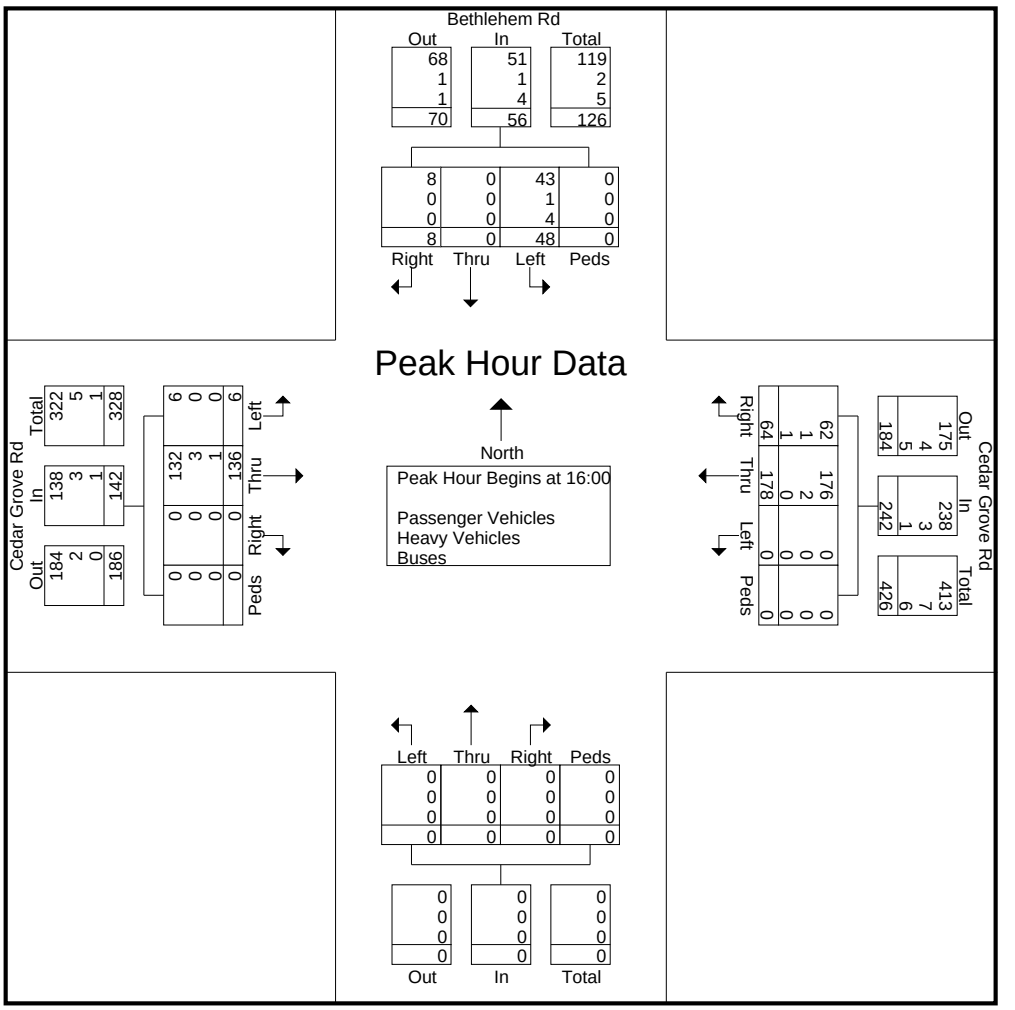
File Name : Cedar Grove Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024

	Bethlehem Rd Southbound					Cedar Grove Rd Westbound					Northbound					Cedar Grove Rd Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	11	0	**2**	0	13	0	**54**	**16**	0	**70**	0	0	0	0	0	2	32	0	0	34	117
16:15	10	0	2	0	12	0	48	16	0	64	0	0	0	0	0	0	31	0	0	31	107
16:30	12	0	2	0	14	0	41	16	0	57	0	0	0	0	0	**3**	**45**	0	0	**48**	**119**
16:45	**15**	0	2	0	**17**	0	35	16	0	51	0	0	0	0	0	1	28	0	0	29	97
Total Volume	48	0	8	0	56	0	178	64	0	242	0	0	0	0	0	6	136	0	0	142	440
% App. Total	85.7	0	14.3	0		0	73.6	26.4	0		0	0	0	0		4.2	95.8	0	0		
PHF	.800	.000	1.00	.000	.824	.000	.824	1.00	.000	.864	.000	.000	.000	.000	.000	.500	.756	.000	.000	.740	.924
Passenger Vehicles	43	0	8	0	51	0	176	62	0	238	0	0	0	0	0	6	132	0	0	138	427
% Passenger Vehicles																					
Heavy Vehicles	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	3	0	0	3	7
% Heavy Vehicles	2.1	0	0	0	1.8	0	1.1	1.6	0	1.2	0	0	0	0	0	0	2.2	0	0	2.1	1.6
Buses	4	0	0	0	4	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	6
% Buses	8.3	0	0	0	7.1	0	0	1.6	0	0.4	0	0	0	0	0	0	0.7	0	0	0.7	1.4



735 Maryland St
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File Name : Clark Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Bethlehem Rd Southbound				Westbound				Bethlehem Rd Northbound				Clark Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	8	1	0	0	0	0	0	1	3	0	0	0	0	0	0	13
07:15	0	12	0	0	0	0	0	0	1	6	0	0	0	0	0	0	19
07:30	0	16	0	0	0	0	0	0	2	8	0	0	0	0	1	0	27
07:45	0	14	1	0	0	0	0	0	2	15	0	0	2	0	3	0	37
Total	0	50	2	0	0	0	0	0	6	32	0	0	2	0	4	0	96
08:00	0	15	0	0	0	0	0	0	1	8	0	0	0	0	1	0	25
08:15	0	12	0	0	0	0	0	0	2	4	0	1	1	0	2	1	23
08:30	0	13	0	0	0	0	0	0	2	7	0	0	1	0	3	0	26
08:45	0	7	1	0	0	0	0	0	0	3	0	4	0	0	2	1	18
Total	0	47	1	0	0	0	0	0	5	22	0	5	2	0	8	2	92
16:00	0	7	0	0	0	0	0	0	0	8	0	0	0	0	1	0	16
16:15	0	8	0	0	0	0	0	0	4	11	0	0	0	0	1	0	24
16:30	0	8	1	0	0	0	0	0	0	10	0	0	0	0	3	0	22
16:45	0	13	1	0	0	0	0	0	2	8	0	0	0	0	2	0	26
Total	0	36	2	0	0	0	0	0	6	37	0	0	0	0	7	0	88
17:00	0	4	0	0	0	0	0	0	1	14	0	0	0	0	1	0	20
17:15	0	5	0	0	0	0	0	0	3	9	0	0	0	0	1	0	18
17:30	0	15	1	0	0	0	0	0	1	8	0	0	0	0	1	0	26
17:45	0	5	0	0	0	0	0	0	0	10	0	0	0	0	1	0	16
Total	0	29	1	0	0	0	0	0	5	41	0	0	0	0	4	0	80
Grand Total	0	162	6	0	0	0	0	0	22	132	0	5	4	0	23	2	356
Apprch %	0	96.4	3.6	0	0	0	0	0	13.8	83	0	3.1	13.8	0	79.3	6.9	
Total %	0	45.5	1.7	0	0	0	0	0	6.2	37.1	0	1.4	1.1	0	6.5	0.6	
Passenger Vehicles	0	158	4	0	0	0	0	0	21	128	0	5	2	0	21	2	341
% Passenger Vehicles	0	97.5	66.7	0	0	0	0	0	95.5	97	0	100	50	0	91.3	100	95.8
Heavy Vehicles	0	1	1	0	0	0	0	0	0	1	0	0	1	0	1	0	5
% Heavy Vehicles	0	0.6	16.7	0	0	0	0	0	0	0.8	0	0	25	0	4.3	0	1.4
Buses	0	3	1	0	0	0	0	0	1	3	0	0	1	0	1	0	10
% Buses	0	1.9	16.7	0	0	0	0	0	4.5	2.3	0	0	25	0	4.3	0	2.8

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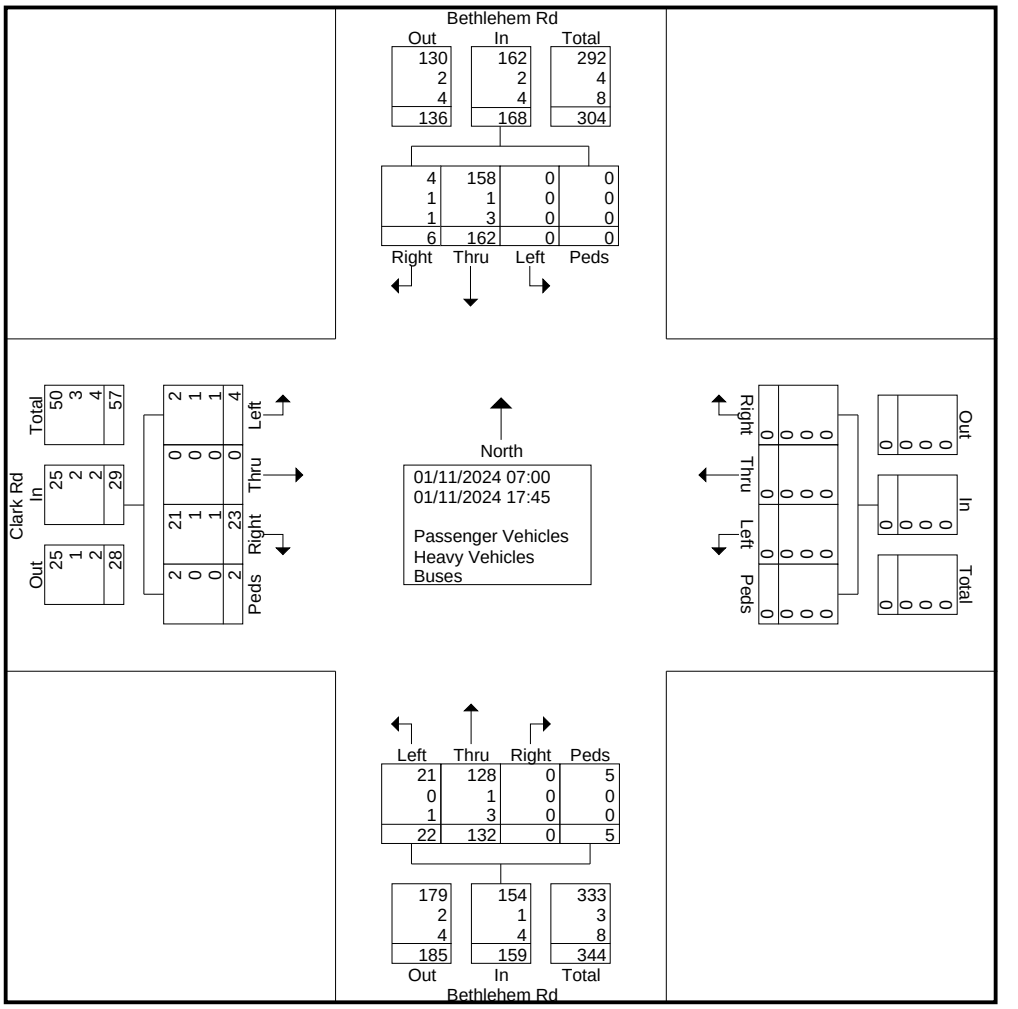
File Name : Clark Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 2



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
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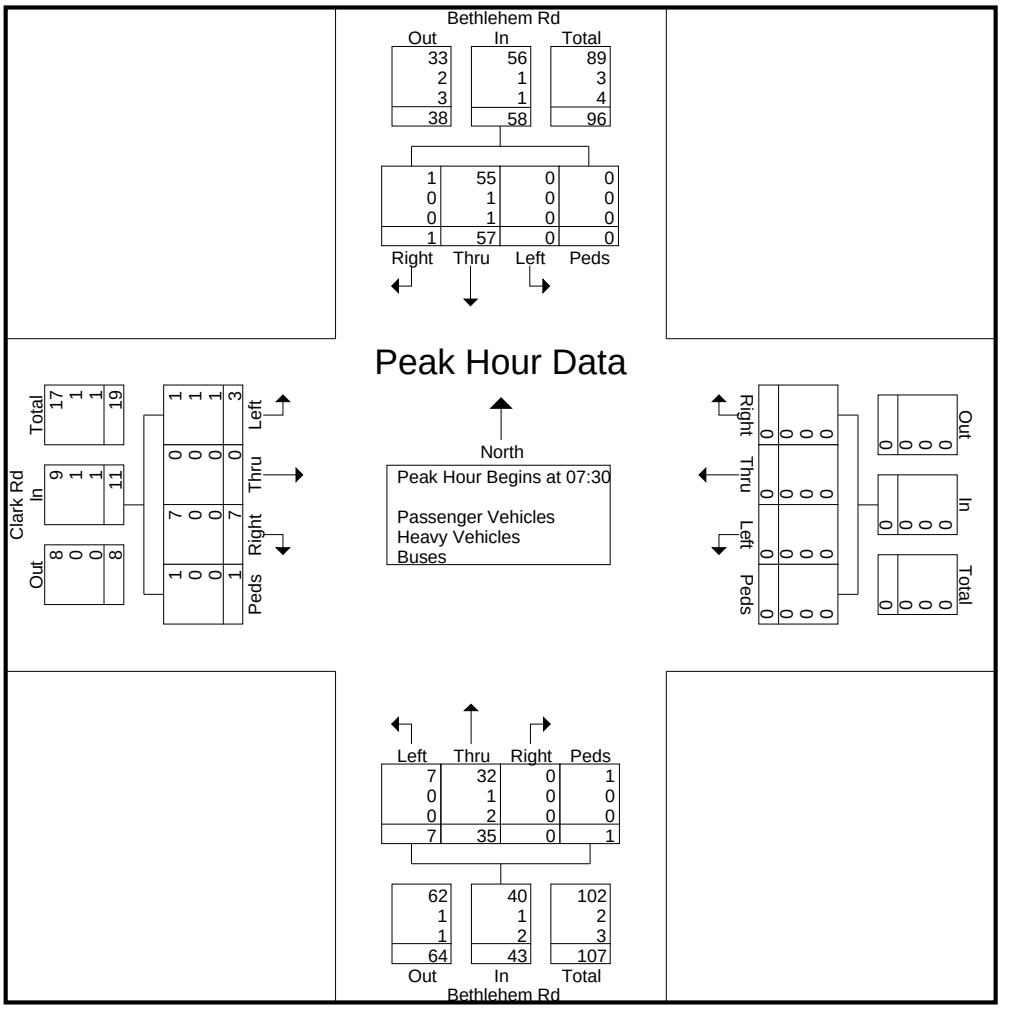
We Can't say we're the Best, but you Can!

File Name : Clark Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 3

	Bethlehem Rd Southbound					Westbound					Bethlehem Rd Northbound					Clark Rd Eastbound					
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 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	**16**	0	0	**16**	0	0	0	0	0	**2**	8	0	0	10	0	0	1	0	1	27
07:45	0	14	**1**	0	15	0	0	0	0	0	2	**15**	0	0	**17**	**2**	0	**3**	0	**5**	**37**
08:00	0	15	0	0	15	0	0	0	0	0	1	8	0	0	9	0	0	1	0	1	25
08:15	0	12	0	0	12	0	0	0	0	0	2	4	0	**1**	7	1	0	2	**1**	4	23
Total Volume	0	57	1	0	58	0	0	0	0	0	7	35	0	1	43	3	0	7	1	11	112
% App. Total	0	98.3	1.7	0		0	0	0	0		16.3	81.4	0	2.3		27.3	0	63.6	9.1		
PHF	.000	.891	.250	.000	.906	.000	.000	.000	.000	.000	.875	.583	.000	.250	.632	.375	.000	.583	.250	.550	.757
Passenger Vehicles	0	55	1	0	56	0	0	0	0	0	7	32	0	1	40	1	0	7	1	9	105
% Passenger Vehicles																					
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
% Heavy Vehicles	0	1.8	0	0	1.7	0	0	0	0	0	0	2.9	0	0	2.3	33.3	0	0	0	9.1	2.7
Buses	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	4
% Buses	0	1.8	0	0	1.7	0	0	0	0	0	0	5.7	0	0	4.7	33.3	0	0	0	9.1	3.6



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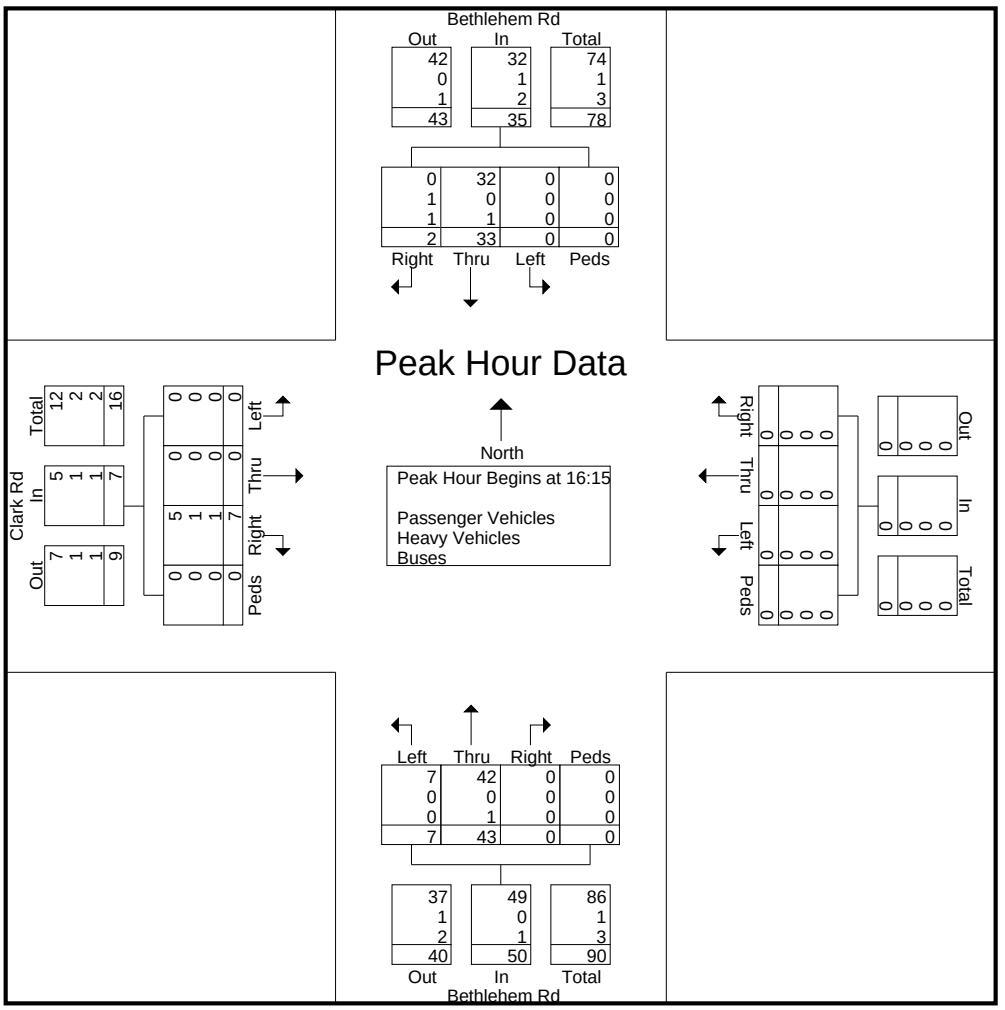
File Name : Clark Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
Page No : 4

	Bethlehem Rd Southbound					Westbound					Bethlehem Rd Northbound					Clark Rd Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	0	8	0	0	8	0	0	0	0	0	**4**	11	0	0	**15**	0	0	1	0	1	24
16:30	0	8	**1**	0	9	0	0	0	0	0	0	10	0	0	10	0	0	**3**	0	**3**	22
16:45	0	**13**	1	0	**14**	0	0	0	0	0	2	8	0	0	10	0	0	2	0	2	**26**
17:00	0	4	0	0	4	0	0	0	0	0	1	**14**	0	0	15	0	0	1	0	1	20
Total Volume	0	33	2	0	35	0	0	0	0	0	7	43	0	0	50	0	0	7	0	7	92
% App. Total	0	94.3	5.7	0		0	0	0	0		14	86	0	0		0	0	100	0		
PHF	.000	.635	.500	.000	.625	.000	.000	.000	.000	.000	.438	.768	.000	.000	.833	.000	.000	.583	.000	.583	.885
Passenger Vehicles	0	32	0	0	32	0	0	0	0	0	7	42	0	0	49	0	0	5	0	5	86
% Passenger Vehicles																					
Heavy Vehicles	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
% Heavy Vehicles	0	0	50.0	0	2.9	0	0	0	0	0	0	0	0	0	0	0	0	14.3	0	14.3	2.2
Buses	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	4
% Buses	0	3.0	50.0	0	5.7	0	0	0	0	0	0	2.3	0	0	2.0	0	0	14.3	0	14.3	4.3



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File Name : Clark Rd @ Ridge Rd
Site Code :
Start Date : 01/11/2024
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Ridge Rd Southbound				Clark Rd Westbound				Ridge Rd Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	3	0	0	2	0	1	0	0	4	0	0	0	0	0	0	10
07:15	0	6	0	0	2	0	1	0	0	8	1	0	0	0	0	0	18
07:30	2	13	0	0	0	0	2	0	0	13	1	0	0	0	0	0	31
07:45	3	15	0	0	2	0	0	0	0	3	4	0	0	0	0	0	27
Total	5	37	0	0	6	0	4	0	0	28	6	0	0	0	0	0	86
08:00	0	4	0	0	3	0	0	0	0	10	2	0	0	0	0	0	19
08:15	0	5	0	0	2	0	2	0	0	11	3	0	0	0	0	0	23
08:30	0	5	0	1	2	0	0	0	0	3	3	0	0	0	0	0	14
08:45	0	5	0	0	0	0	0	0	0	1	3	0	0	0	0	0	9
Total	0	19	0	1	7	0	2	0	0	25	11	0	0	0	0	0	65
16:00	0	4	0	0	1	0	0	0	0	8	2	0	0	0	0	0	15
16:15	1	12	0	0	1	0	0	0	0	7	3	0	0	0	0	0	24
16:30	0	11	0	0	0	0	1	0	0	9	2	0	0	0	0	0	23
16:45	0	11	0	0	4	0	1	0	0	7	1	0	0	0	0	0	24
Total	1	38	0	0	6	0	2	0	0	31	8	0	0	0	0	0	86
17:00	0	11	0	0	1	0	1	0	0	11	2	0	0	0	0	0	26
17:15	0	4	0	0	2	0	0	0	0	3	1	0	0	0	0	0	10
17:30	0	10	0	0	1	0	0	0	0	10	1	0	0	0	0	0	22
17:45	0	20	0	0	0	0	0	0	0	7	1	0	0	0	0	0	28
Total	0	45	0	0	4	0	1	0	0	31	5	0	0	0	0	0	86
Grand Total	6	139	0	1	23	0	9	0	0	115	30	0	0	0	0	0	323
Apprch %	4.1	95.2	0	0.7	71.9	0	28.1	0	0	79.3	20.7	0	0	0	0	0	
Total %	1.9	43	0	0.3	7.1	0	2.8	0	0	35.6	9.3	0	0	0	0	0	
Passenger Vehicles	5	134	0	1	21	0	8	0	0	110	25	0	0	0	0	0	304
% Passenger Vehicles	83.3	96.4	0	100	91.3	0	88.9	0	0	95.7	83.3	0	0	0	0	0	94.1
Heavy Vehicles	0	4	0	0	1	0	0	0	0	4	3	0	0	0	0	0	12
% Heavy Vehicles	0	2.9	0	0	4.3	0	0	0	0	3.5	10	0	0	0	0	0	3.7
Buses	1	1	0	0	1	0	1	0	0	1	2	0	0	0	0	0	7
% Buses	16.7	0.7	0	0	4.3	0	11.1	0	0	0.9	6.7	0	0	0	0	0	2.2

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : Clark Rd @ Ridge Rd
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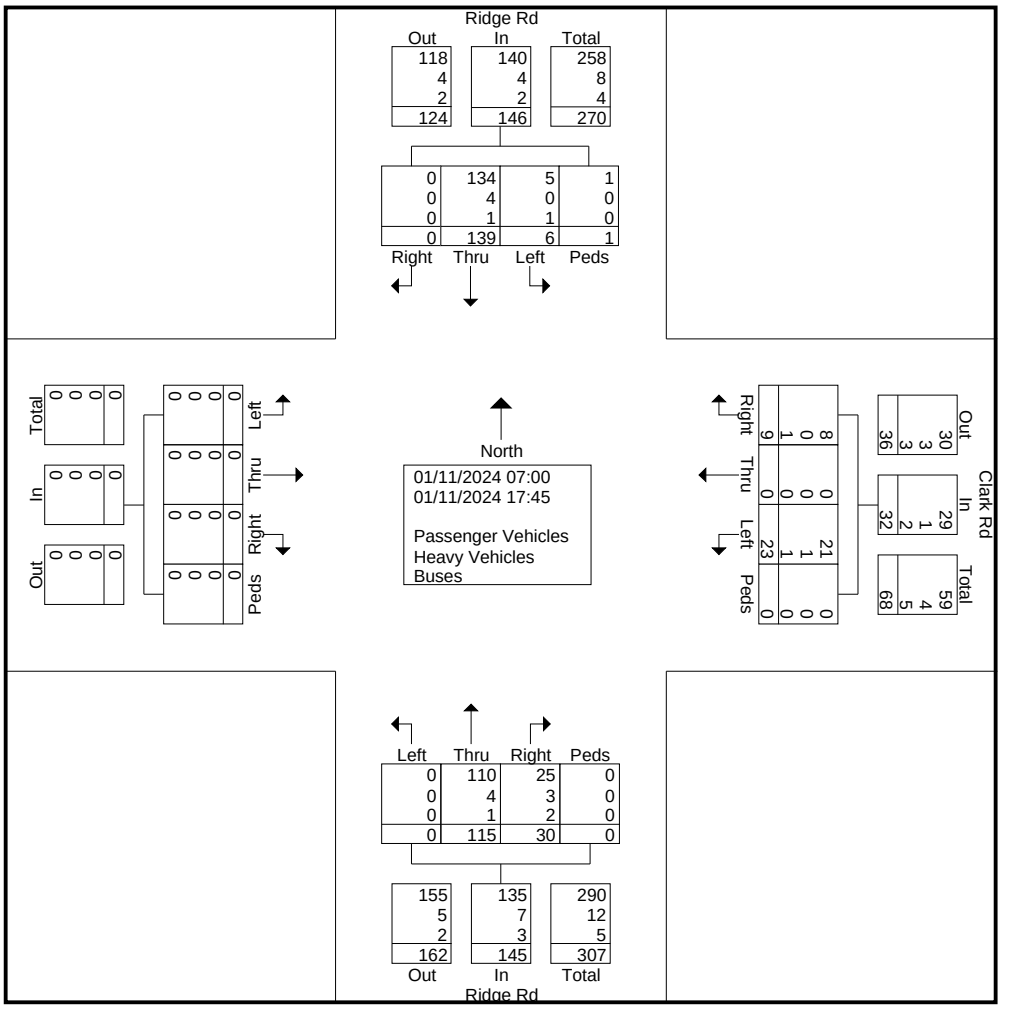

SHORT COUNTS
Traffic Data Specialists

735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : Clark Rd @ Ridge Rd
Site Code :
Start Date : 01/11/2024
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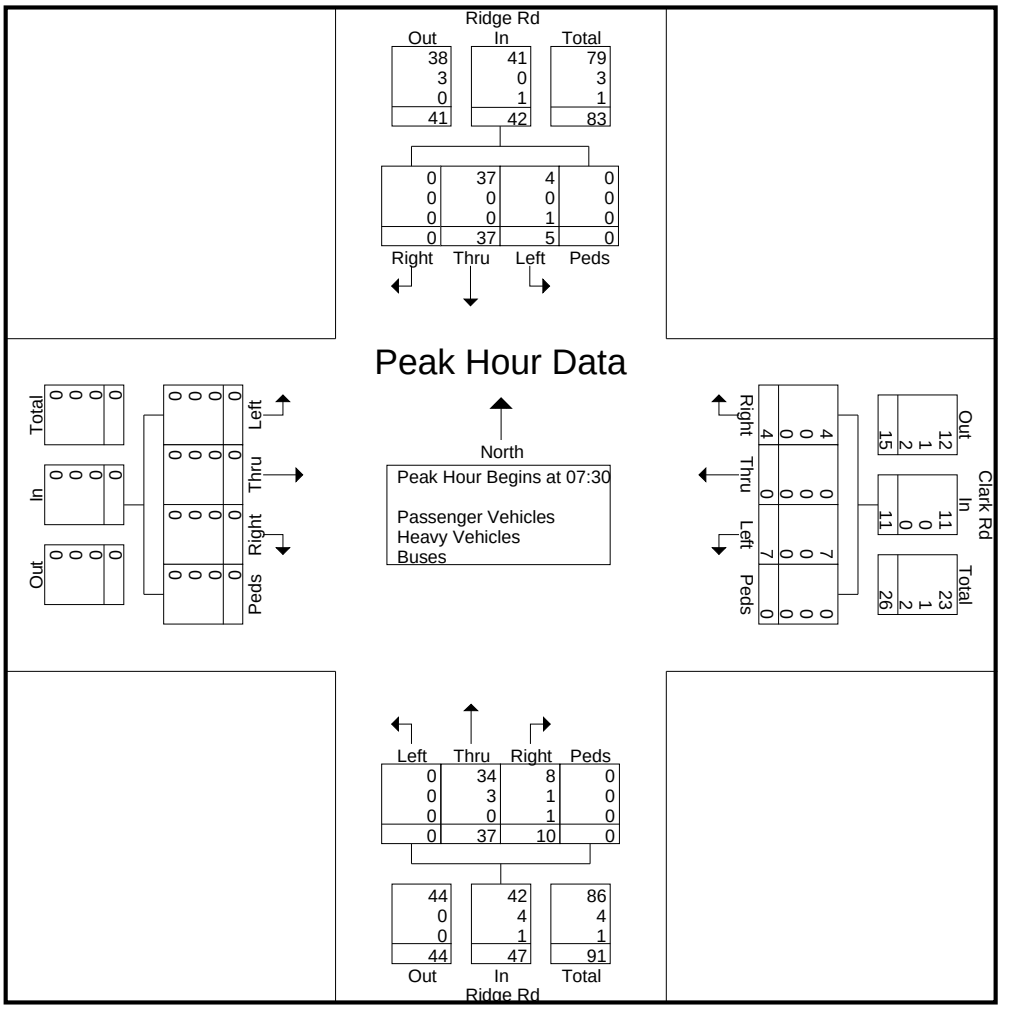
	Ridge Rd Southbound					Clark Rd Westbound					Ridge Rd Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	2	13	0	0	15	0	0	**2**	0	2	0	**13**	1	0	**14**	0	0	0	0	0	**31**
07:45	**3**	**15**	0	0	**18**	2	0	0	0	2	0	3	**4**	0	7	0	0	0	0	0	27
08:00	0	4	0	0	4	**3**	0	0	0	3	0	10	2	0	12	0	0	0	0	0	19
08:15	0	5	0	0	5	2	0	2	0	**4**	0	11	3	0	14	0	0	0	0	0	23
Total Volume	5	37	0	0	42	7	0	4	0	11	0	37	10	0	47	0	0	0	0	0	100
% App. Total	11.9	88.1	0	0		63.6	0	36.4	0		0	78.7	21.3	0		0	0	0	0		
PHF	.417	.617	.000	.000	.583	.583	.000	.500	.000	.688	.000	.712	.625	.000	.839	.000	.000	.000	.000	.000	.806
Passenger Vehicles	4	37	0	0	41	7	0	4	0	11	0	34	8	0	42	0	0	0	0	0	94
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	4
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	8.1	10.0	0	8.5	0	0	0	0	0	4.0
Buses	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
% Buses	20.0	0	0	0	2.4	0	0	0	0	0	0	0	10.0	0	2.1	0	0	0	0	0	2.0



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
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File Name : Clark Rd @ Ridge Rd
Site Code :
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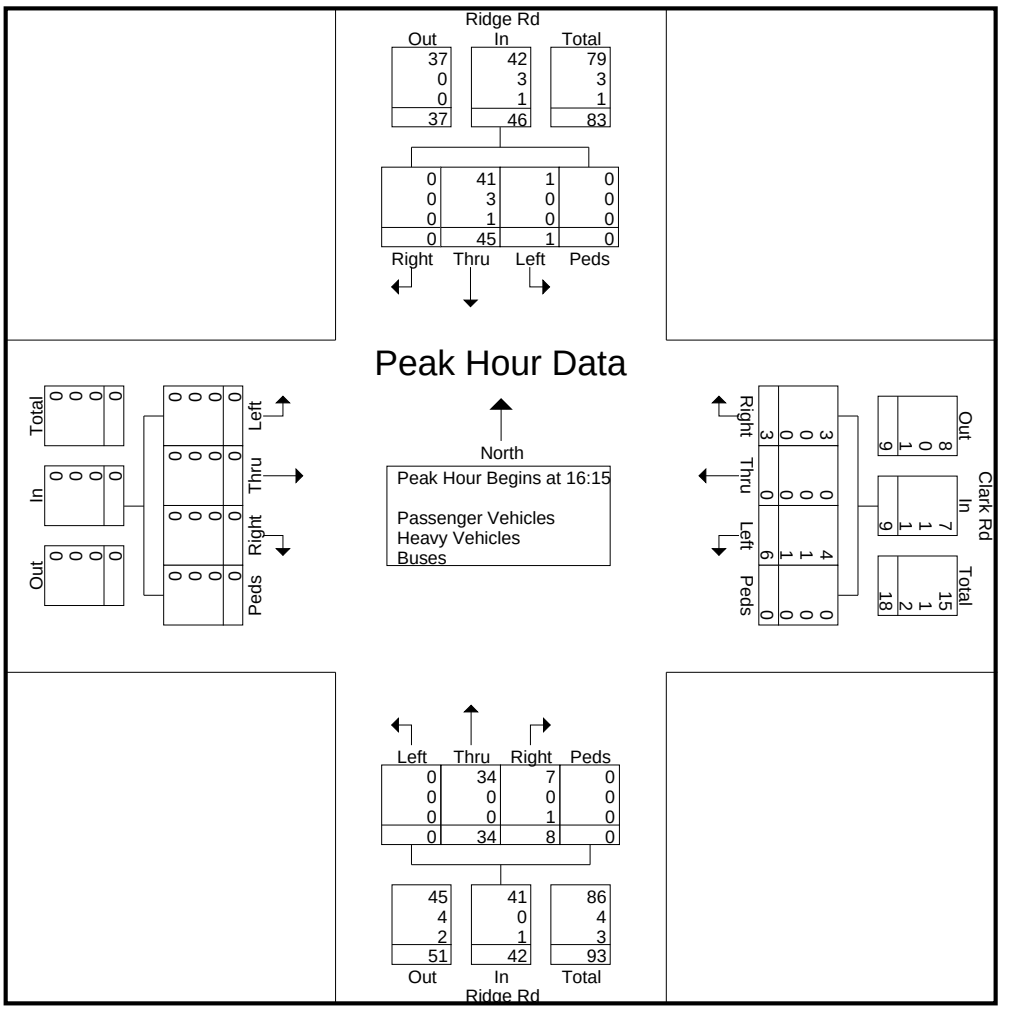
	Ridge Rd Southbound					Clark Rd Westbound					Ridge Rd Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	**1**	**12**	0	0	**13**	1	0	0	0	1	0	7	**3**	0	10	0	0	0	0	0	24
16:30	0	11	0	0	11	0	0	**1**	0	1	0	9	2	0	11	0	0	0	0	0	23
16:45	0	11	0	0	11	**4**	0	1	0	**5**	0	7	1	0	8	0	0	0	0	0	24
17:00	0	11	0	0	11	1	0	1	0	2	0	**11**	2	0	**13**	0	0	0	0	0	**26**
Total Volume	1	45	0	0	46	6	0	3	0	9	0	34	8	0	42	0	0	0	0	0	97
% App. Total	2.2	97.8	0	0		66.7	0	33.3	0		0	81	19	0		0	0	0	0		
PHF	.250	.938	.000	.000	.885	.375	.000	.750	.000	.450	.000	.773	.667	.000	.808	.000	.000	.000	.000	.000	.933
Passenger Vehicles	1	41	0	0	42	4	0	3	0	7	0	34	7	0	41	0	0	0	0	0	90
% Passenger Vehicles																					
Heavy Vehicles	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
% Heavy Vehicles	0	6.7	0	0	6.5	16.7	0	0	0	11.1	0	0	0	0	0	0	0	0	0	0	4.1
Buses	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	3
% Buses	0	2.2	0	0	2.2	16.7	0	0	0	11.1	0	0	12.5	0	2.4	0	0	0	0	0	3.1



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : Ridge Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Southbound				Ridge Rd Westbound				Bethlehem Rd Northbound				Ridge Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	0	0	0	1	1	0	0	0	0	4	0	0	6	3	0	15
07:15	0	0	0	0	4	5	0	0	1	0	8	0	0	8	2	0	28
07:30	0	0	0	0	7	13	0	0	2	0	16	0	0	5	7	0	50
07:45	0	0	0	0	9	11	0	0	4	0	16	0	0	8	3	0	51
Total	0	0	0	0	21	30	0	0	7	0	44	0	0	27	15	0	144
08:00	0	0	0	0	8	3	0	0	1	0	6	0	0	9	1	0	28
08:15	0	0	0	0	6	2	0	0	1	0	4	0	0	9	2	0	24
08:30	0	0	0	0	1	7	0	0	5	0	5	0	0	3	3	0	24
08:45	0	0	0	0	2	5	0	0	3	0	2	0	0	1	0	0	13
Total	0	0	0	0	17	17	0	0	10	0	17	0	0	22	6	0	89
16:00	0	0	0	0	8	7	0	0	2	0	3	0	0	5	2	0	27
16:15	0	0	0	0	9	9	0	0	1	0	8	0	0	6	2	0	35
16:30	0	0	0	0	13	11	0	0	1	0	5	0	0	6	3	0	39
16:45	0	0	0	0	11	8	0	0	1	0	9	0	0	8	1	0	38
Total	0	0	0	0	41	35	0	0	5	0	25	0	0	25	8	0	139
17:00	0	0	0	0	8	9	0	0	3	0	5	0	0	7	0	0	32
17:15	0	0	0	0	6	10	0	0	1	0	3	0	0	2	1	0	23
17:30	0	0	0	0	12	11	0	0	0	0	11	0	0	5	3	0	42
17:45	0	0	0	0	8	20	0	0	1	0	6	0	0	8	1	0	44
Total	0	0	0	0	34	50	0	0	5	0	25	0	0	22	5	0	141
Grand Total	0	0	0	0	113	132	0	0	27	0	111	0	0	96	34	0	513
Apprch %	0	0	0	0	46.1	53.9	0	0	19.6	0	80.4	0	0	73.8	26.2	0	
Total %	0	0	0	0	22	25.7	0	0	5.3	0	21.6	0	0	18.7	6.6	0	
Passenger Vehicles	0	0	0	0	108	129	0	0	27	0	104	0	0	93	29	0	490
% Passenger Vehicles	0	0	0	0	95.6	97.7	0	0	100	0	93.7	0	0	96.9	85.3	0	95.5
Heavy Vehicles	0	0	0	0	3	1	0	0	0	0	2	0	0	1	4	0	11
% Heavy Vehicles	0	0	0	0	2.7	0.8	0	0	0	0	1.8	0	0	1	11.8	0	2.1
Buses	0	0	0	0	2	2	0	0	0	0	5	0	0	2	1	0	12
% Buses	0	0	0	0	1.8	1.5	0	0	0	0	4.5	0	0	2.1	2.9	0	2.3

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File Name : Ridge Rd @ Bethlehem Rd
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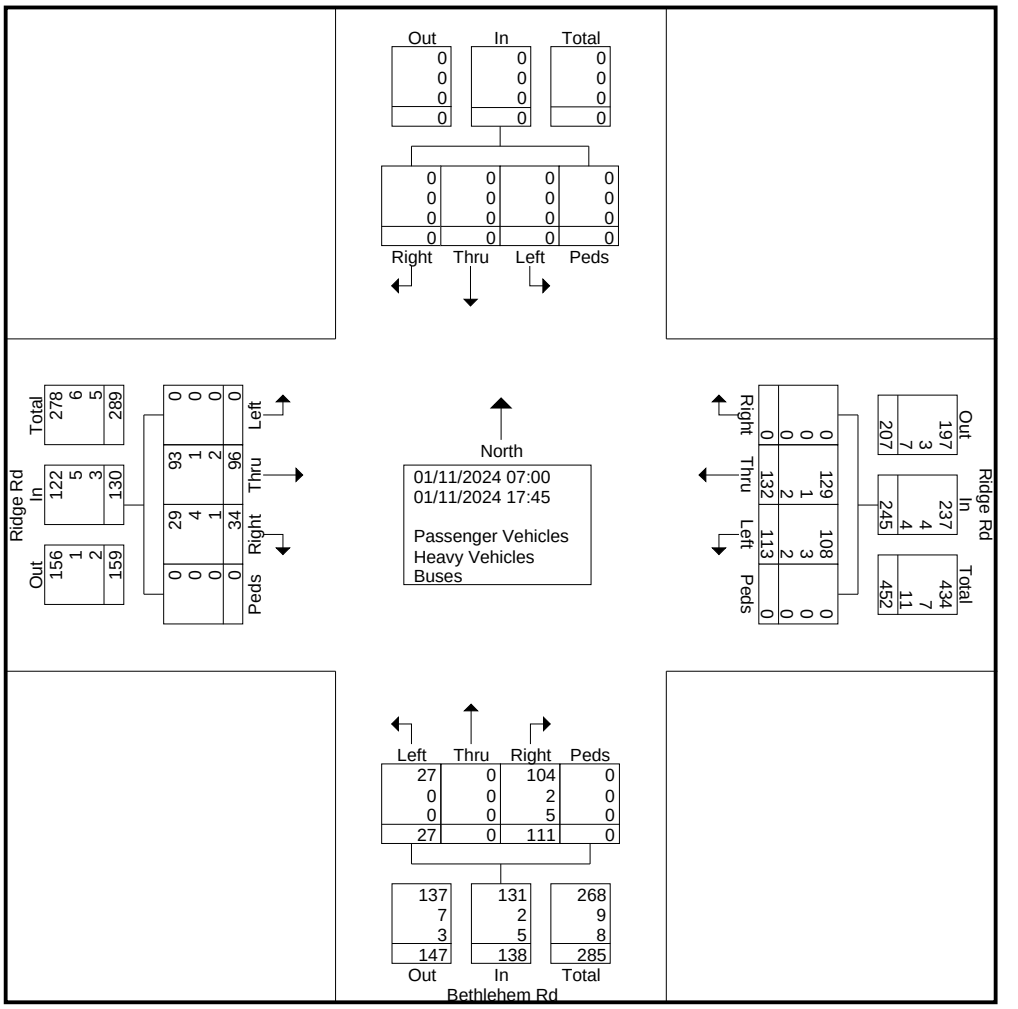

735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : Ridge Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
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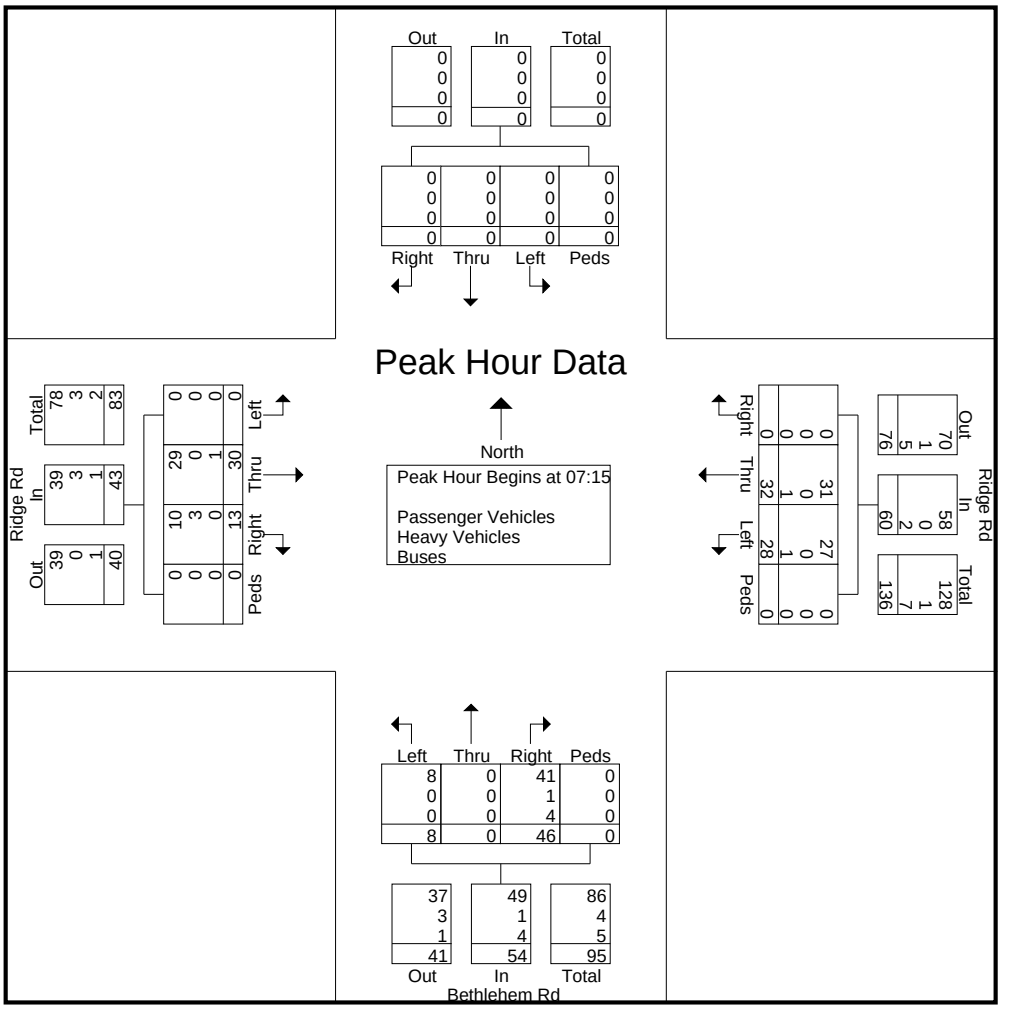
	Southbound					Ridge Rd Westbound					Bethlehem Rd Northbound					Ridge Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	0	0	0	0	0	4	5	0	0	9	1	0	8	0	9	0	8	2	0	10	28
07:30	0	0	0	0	0	7	**13**	0	0	**20**	2	0	**16**	0	18	0	5	**7**	0	**12**	50
07:45	0	0	0	0	0	**9**	11	0	0	20	**4**	0	16	0	**20**	0	8	3	0	11	**51**
08:00	0	0	0	0	0	8	3	0	0	11	1	0	6	0	7	0	**9**	1	0	10	28
Total Volume	0	0	0	0	0	28	32	0	0	60	8	0	46	0	54	0	30	13	0	43	157
% App. Total	0	0	0	0		46.7	53.3	0	0		14.8	0	85.2	0		0	69.8	30.2	0		
PHF	.000	.000	.000	.000	.000	.778	.615	.000	.000	.750	.500	.000	.719	.000	.675	.000	.833	.464	.000	.896	.770
Passenger Vehicles	0	0	0	0	0	27	31	0	0	58	8	0	41	0	49	0	29	10	0	39	146
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	0	3	4
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	2.2	0	1.9	0	0	23.1	0	7.0	2.5
Buses	0	0	0	0	0	1	1	0	0	2	0	0	4	0	4	0	1	0	0	1	7
% Buses	0	0	0	0	0	3.6	3.1	0	0	3.3	0	0	8.7	0	7.4	0	3.3	0	0	2.3	4.5



735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : Ridge Rd @ Bethlehem Rd
Site Code :
Start Date : 01/11/2024
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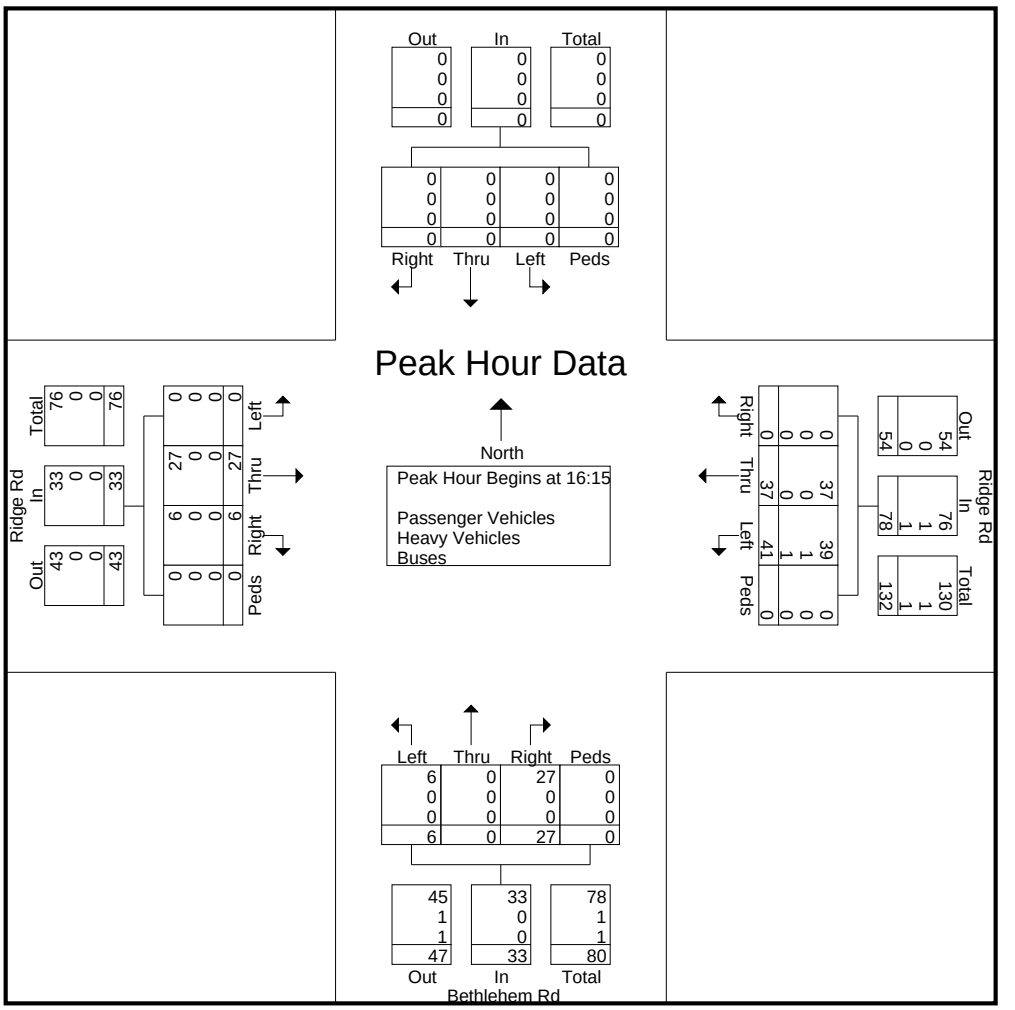
	Southbound					Ridge Rd Westbound					Bethlehem Rd Northbound					Ridge Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	0	0	0	0	0	9	9	0	0	18	1	0	8	0	9	0	6	2	0	8	35
16:30	0	0	0	0	0	**13**	**11**	0	0	**24**	1	0	5	0	6	0	6	**3**	0	**9**	**39**
16:45	0	0	0	0	0	11	8	0	0	19	1	0	**9**	0	**10**	0	**8**	1	0	9	38
17:00	0	0	0	0	0	8	9	0	0	17	**3**	0	5	0	8	0	7	0	0	7	32
Total Volume	0	0	0	0	0	41	37	0	0	78	6	0	27	0	33	0	27	6	0	33	144
% App. Total	0	0	0	0		52.6	47.4	0	0		18.2	0	81.8	0		0	81.8	18.2	0		
PHF	.000	.000	.000	.000	.000	.788	.841	.000	.000	.813	.500	.000	.750	.000	.825	.000	.844	.500	.000	.917	.923
Passenger Vehicles	0	0	0	0	0	39	37	0	0	76	6	0	27	0	33	0	27	6	0	33	142
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0	0	0	0	0	2.4	0	0	0	1.3	0	0	0	0	0	0	0	0	0	0	0.7
Buses	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Buses	0	0	0	0	0	2.4	0	0	0	1.3	0	0	0	0	0	0	0	0	0	0	0.7



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : S. Fulton Pkwy @ Cedar Grove Rd
Site Code :
Start Date : 01/11/2024
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Cedar Grove Rd Southbound				S. Fulton Pkwy Westbound				Cedar Grove Rd Northbound				S. Fulton Pkwy Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	35	22	4	0	8	38	13	0	1	27	74	0	3	120	11	0	356
07:15	49	35	4	0	19	36	16	0	2	19	74	0	7	133	4	0	398
07:30	31	39	3	0	37	76	22	0	2	18	62	0	8	126	11	0	435
07:45	44	46	4	0	40	98	26	0	6	21	61	0	6	187	5	0	544
Total	159	142	15	0	104	248	77	0	11	85	271	0	24	566	31	0	1733
08:00	35	29	7	0	31	87	20	0	4	30	65	0	6	193	13	0	520
08:15	29	30	3	0	37	36	12	0	1	21	66	0	5	148	8	0	396
08:30	36	36	0	0	26	47	21	0	3	19	67	0	4	99	4	0	362
08:45	34	24	3	0	26	29	12	0	5	18	51	0	5	87	4	0	298
Total	134	119	13	0	120	199	65	0	13	88	249	0	20	527	29	0	1576
16:00	14	32	6	0	58	116	33	0	4	63	46	0	1	60	6	1	440
16:15	21	37	0	0	58	141	36	0	10	46	33	0	7	63	11	0	463
16:30	25	38	5	0	50	144	30	0	7	34	43	0	2	67	8	1	454
16:45	29	34	4	0	52	156	33	0	7	45	27	0	4	62	9	0	462
Total	89	141	15	0	218	557	132	0	28	188	149	0	14	252	34	2	1819
17:00	26	25	2	0	52	150	33	0	8	45	32	0	5	62	7	0	447
17:15	27	29	2	0	55	135	36	0	5	49	52	0	7	66	7	0	470
17:30	21	44	4	0	61	136	33	0	10	46	54	0	4	63	13	0	489
17:45	14	36	3	0	72	132	24	0	5	36	39	0	1	72	10	0	444
Total	88	134	11	0	240	553	126	0	28	176	177	0	17	263	37	0	1850
Grand Total	470	536	54	0	682	1557	400	0	80	537	846	0	75	1608	131	2	6978
Apprch %	44.3	50.6	5.1	0	25.8	59	15.2	0	5.5	36.7	57.8	0	4.1	88.5	7.2	0.1	
Total %	6.7	7.7	0.8	0	9.8	22.3	5.7	0	1.1	7.7	12.1	0	1.1	23	1.9	0	
Passenger Vehicles	457	531	54	0	672	1499	391	0	75	525	830	0	73	1566	129	2	6804
% Passenger Vehicles	97.2	99.1	100	0	98.5	96.3	97.8	0	93.8	97.8	98.1	0	97.3	97.4	98.5	100	97.5
Heavy Vehicles	4	5	0	0	3	47	4	0	2	10	4	0	2	36	2	0	119
% Heavy Vehicles	0.9	0.9	0	0	0.4	3	1	0	2.5	1.9	0.5	0	2.7	2.2	1.5	0	1.7
Buses	9	0	0	0	7	11	5	0	3	2	12	0	0	6	0	0	55
% Buses	1.9	0	0	0	1	0.7	1.2	0	3.8	0.4	1.4	0	0	0.4	0	0	0.8

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : S. Fulton Pkwy @ Cedar Grove Rd
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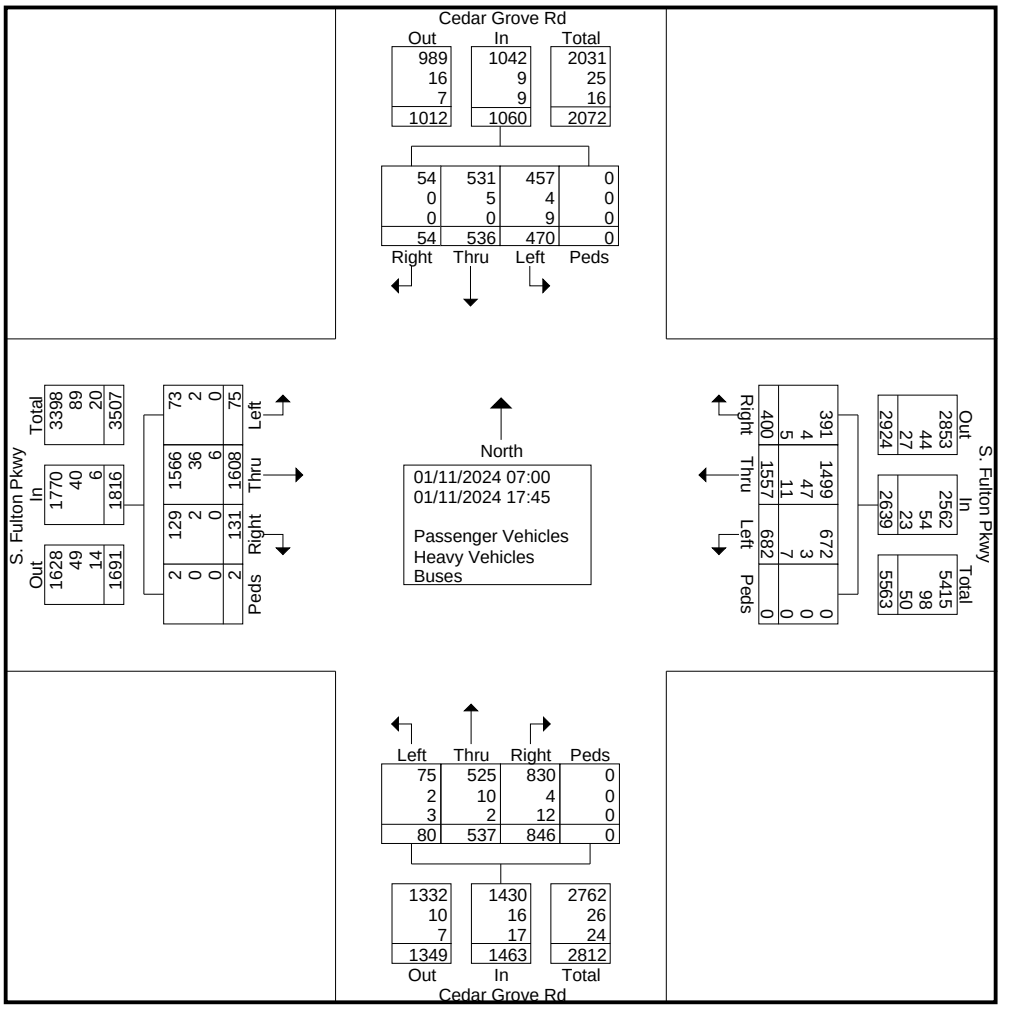

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : S. Fulton Pkwy @ Cedar Grove Rd
Site Code :
Start Date : 01/11/2024
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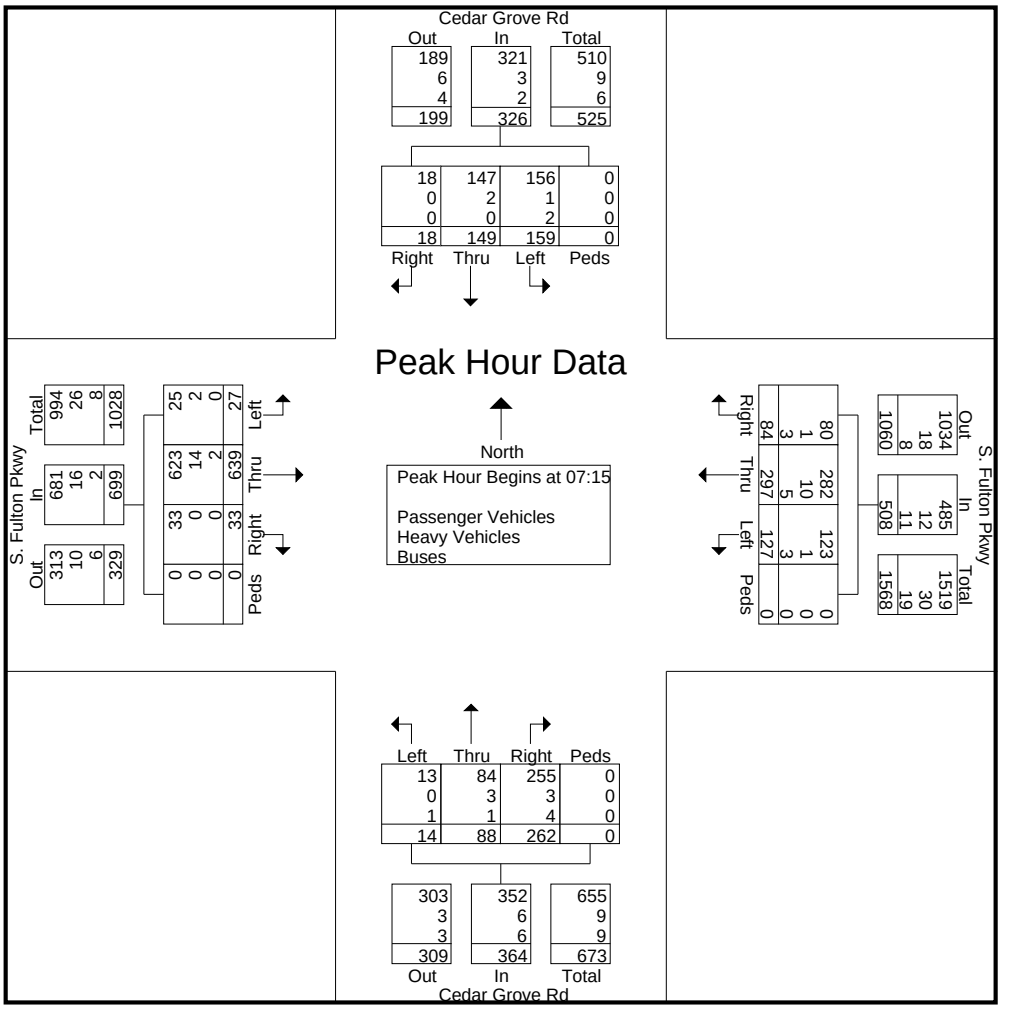
	Cedar Grove Rd Southbound					S. Fulton Pkwy Westbound					Cedar Grove Rd Northbound					S. Fulton Pkwy Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	**49**	35	4	0	88	19	36	16	0	71	2	19	**74**	0	95	7	133	4	0	144	398
07:30	31	39	3	0	73	37	76	22	0	135	2	18	62	0	82	**8**	126	11	0	145	435
07:45	44	**46**	4	0	**94**	**40**	**98**	**26**	0	**164**	**6**	21	61	0	88	6	187	5	0	198	**544**
08:00	35	29	**7**	0	71	31	87	20	0	138	4	**30**	65	0	**99**	6	**193**	**13**	0	**212**	520
Total Volume	159	149	18	0	326	127	297	84	0	508	14	88	262	0	364	27	639	33	0	699	1897
% App. Total	48.8	45.7	5.5	0		25	58.5	16.5	0		3.8	24.2	72	0		3.9	91.4	4.7	0		
PHF	.811	.810	.643	.000	.867	.794	.758	.808	.000	.774	.583	.733	.885	.000	.919	.844	.828	.635	.000	.824	.872
Passenger Vehicles	156	147	18	0	321	123	282	80	0	485	13	84	255	0	352	25	623	33	0	681	1839
% Passenger Vehicles																					
Heavy Vehicles	1	2	0	0	3	1	10	1	0	12	0	3	3	0	6	2	14	0	0	16	37
% Heavy Vehicles	0.6	1.3	0	0	0.9	0.8	3.4	1.2	0	2.4	0	3.4	1.1	0	1.6	7.4	2.2	0	0	2.3	2.0
Buses	2	0	0	0	2	3	5	3	0	11	1	1	4	0	6	0	2	0	0	2	21
% Buses	1.3	0	0	0	0.6	2.4	1.7	3.6	0	2.2	7.1	1.1	1.5	0	1.6	0	0.3	0	0	0.3	1.1



735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : S. Fulton Pkwy @ Cedar Grove Rd
Site Code :
Start Date : 01/11/2024
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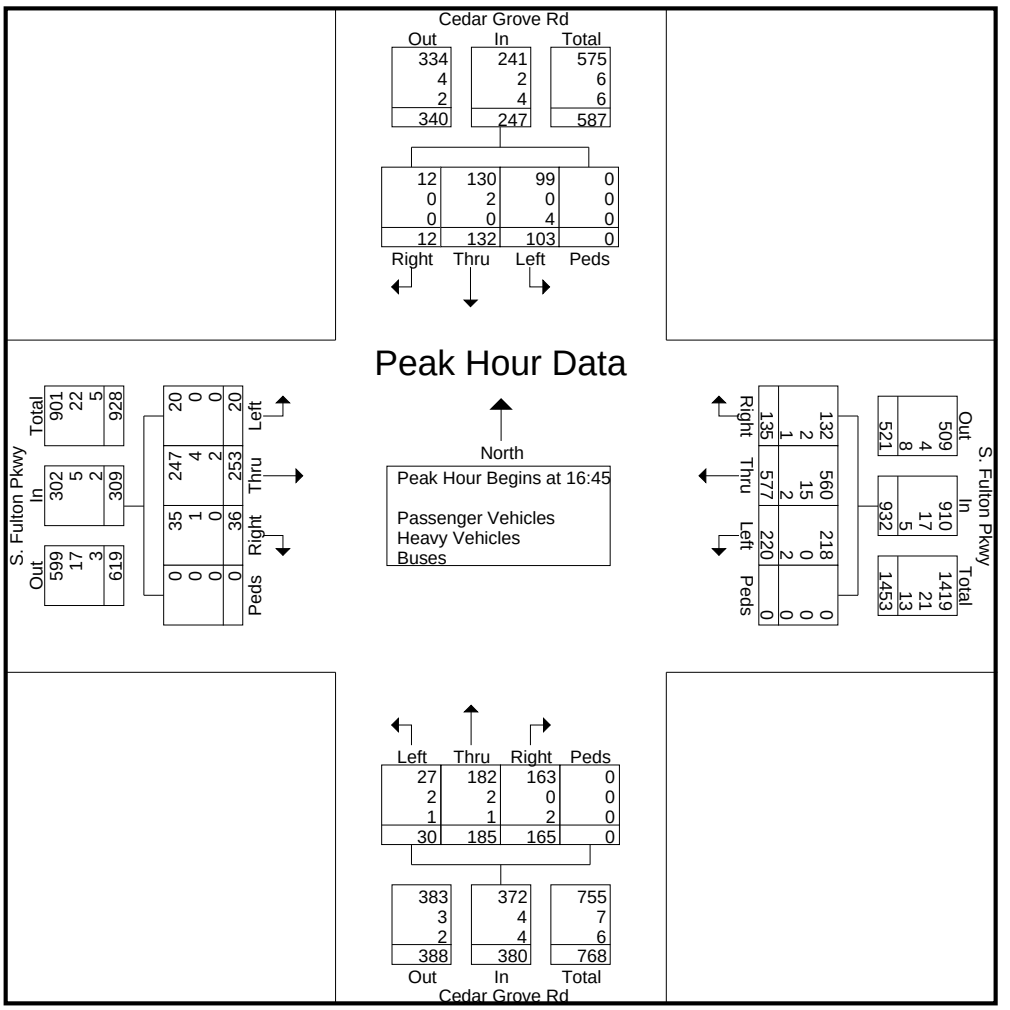
	Cedar Grove Rd Southbound					S. Fulton Pkwy Westbound					Cedar Grove Rd Northbound					S. Fulton Pkwy Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	**29**	34	**4**	0	67	52	**156**	33	0	**241**	7	45	27	0	79	4	62	9	0	75	462
17:00	26	25	2	0	53	52	150	33	0	235	8	45	32	0	85	5	62	7	0	74	447
17:15	27	29	2	0	58	55	135	**36**	0	226	5	**49**	52	0	106	**7**	**66**	7	0	**80**	470
17:30	21	**44**	4	0	**69**	**61**	136	33	0	230	**10**	46	**54**	0	**110**	4	63	**13**	0	80	**489**
Total Volume	103	132	12	0	247	220	577	135	0	932	30	185	165	0	380	20	253	36	0	309	1868
% App. Total	41.7	53.4	4.9	0		23.6	61.9	14.5	0		7.9	48.7	43.4	0		6.5	81.9	11.7	0		
PHF	.888	.750	.750	.000	.895	.902	.925	.938	.000	.967	.750	.944	.764	.000	.864	.714	.958	.692	.000	.966	.955
Passenger Vehicles	99	130	12	0	241	218	560	132	0	910	27	182	163	0	372	20	247	35	0	302	1825
% Passenger Vehicles																					
Heavy Vehicles	0	2	0	0	2	0	15	2	0	17	2	2	0	0	4	0	4	1	0	5	28
% Heavy Vehicles	0	1.5	0	0	0.8	0	2.6	1.5	0	1.8	6.7	1.1	0	0	1.1	0	1.6	2.8	0	1.6	1.5
Buses	4	0	0	0	4	2	2	1	0	5	1	1	2	0	4	0	2	0	0	2	15
% Buses	3.9	0	0	0	1.6	0.9	0.3	0.7	0	0.5	3.3	0.5	1.2	0	1.1	0	0.8	0	0	0.6	0.8



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Demooney Rd
Site Code :
Start Date : 01/11/2024
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 92 Southbound				Demooney Rd Westbound				SR 92 Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	1	144	0	0	41	0	0	0	0	77	40	0	0	0	0	0	303
07:15	4	173	0	0	63	0	3	0	0	84	56	0	0	0	0	0	383
07:30	2	154	0	0	53	0	4	0	0	96	59	0	0	0	0	0	368
07:45	5	165	0	0	58	0	5	0	0	88	76	0	0	0	0	0	397
Total	12	636	0	0	215	0	12	0	0	345	231	0	0	0	0	0	1451
08:00	4	136	0	0	62	0	2	0	0	81	52	0	0	0	0	0	337
08:15	2	120	0	0	58	0	2	0	0	93	64	0	0	0	0	0	339
08:30	0	141	0	0	48	0	0	0	0	72	62	0	0	0	0	0	323
08:45	3	116	0	0	39	0	1	0	0	73	61	0	0	0	0	0	293
Total	9	513	0	0	207	0	5	0	0	319	239	0	0	0	0	0	1292
16:00	7	98	0	0	32	0	3	0	0	189	109	0	0	0	0	0	438
16:15	2	110	0	0	42	0	6	0	0	192	82	0	0	0	0	0	434
16:30	2	105	0	0	48	0	5	0	0	167	95	0	0	0	0	0	422
16:45	2	128	0	0	54	0	1	0	0	135	86	0	0	0	0	0	406
Total	13	441	0	0	176	0	15	0	0	683	372	0	0	0	0	0	1700
17:00	3	118	0	0	52	0	1	1	0	157	105	0	0	0	0	0	437
17:15	3	127	0	0	46	0	1	0	0	191	79	0	0	0	0	0	447
17:30	7	114	0	0	35	0	3	0	0	178	88	0	0	0	0	0	425
17:45	4	125	0	0	46	0	4	0	0	161	73	0	0	0	0	0	413
Total	17	484	0	0	179	0	9	1	0	687	345	0	0	0	0	0	1722
Grand Total	51	2074	0	0	777	0	41	1	0	2034	1187	0	0	0	0	0	6165
Apprch %	2.4	97.6	0	0	94.9	0	5	0.1	0	63.1	36.9	0	0	0	0	0	
Total %	0.8	33.6	0	0	12.6	0	0.7	0	0	33	19.3	0	0	0	0	0	
Passenger Vehicles	49	1964	0	0	757	0	37	1	0	1940	1166	0	0	0	0	0	5914
% Passenger Vehicles	96.1	94.7	0	0	97.4	0	90.2	100	0	95.4	98.2	0	0	0	0	0	95.9
Heavy Vehicles	2	80	0	0	4	0	1	0	0	85	8	0	0	0	0	0	180
% Heavy Vehicles	3.9	3.9	0	0	0.5	0	2.4	0	0	4.2	0.7	0	0	0	0	0	2.9
Buses	0	30	0	0	16	0	3	0	0	9	13	0	0	0	0	0	71
% Buses	0	1.4	0	0	2.1	0	7.3	0	0	0.4	1.1	0	0	0	0	0	1.2

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File Name : SR 92 @ Demooney Rd
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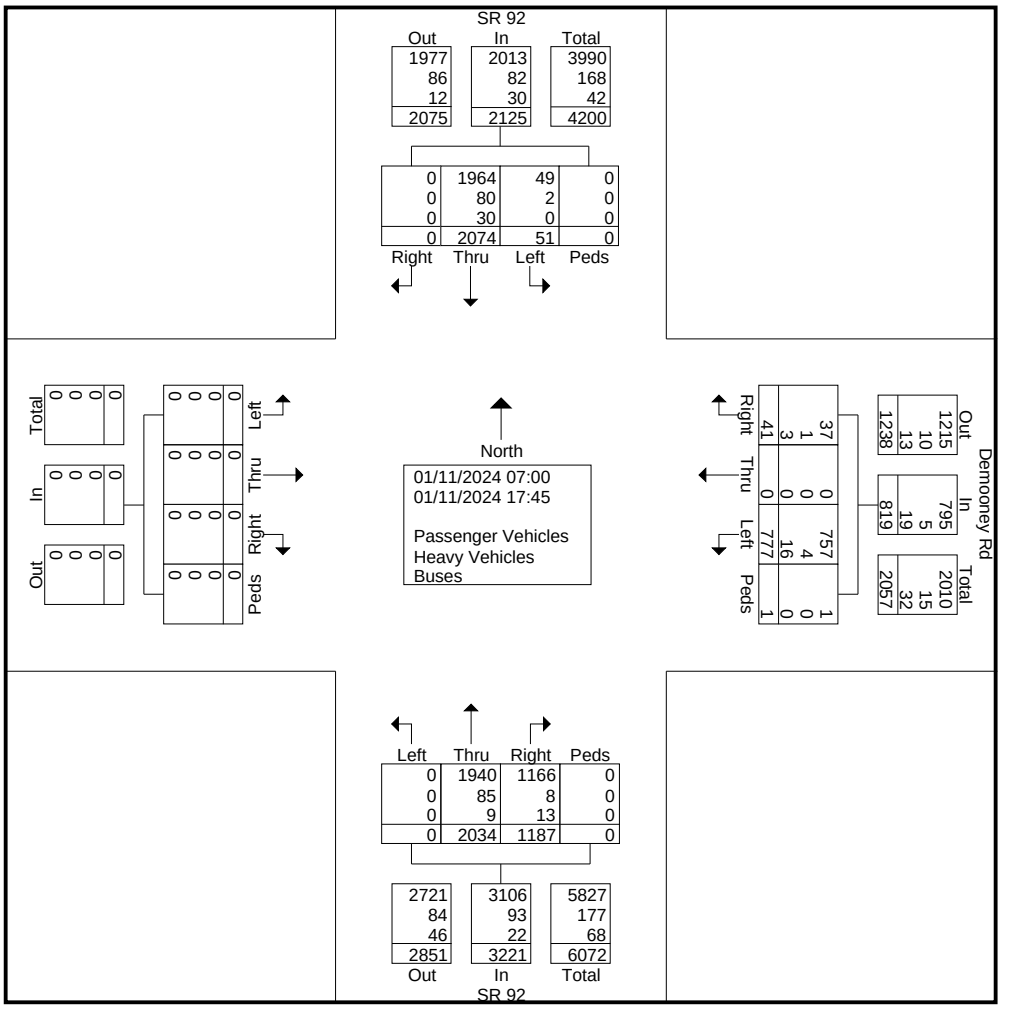

735 Maryland St
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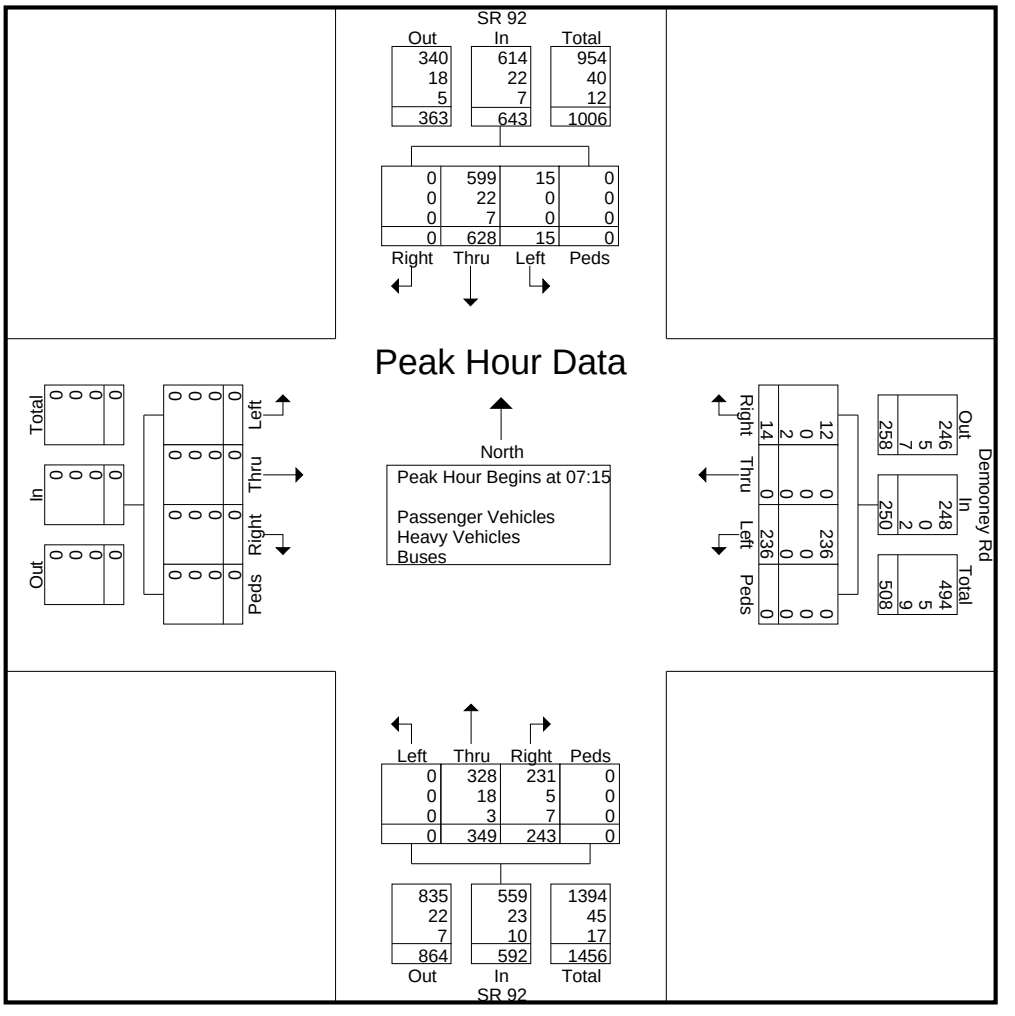
File Name : SR 92 @ Demooney Rd
Site Code :
Start Date : 01/11/2024
Page No : 3

	SR 92 Southbound					Demooney Rd Westbound					SR 92 Northbound					Eastbound					
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 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	4	**173**	0	0	**177**	**63**	0	3	0	**66**	0	84	56	0	140	0	0	0	0	0	383
07:30	2	154	0	0	156	53	0	4	0	57	0	**96**	59	0	155	0	0	0	0	0	368
07:45	**5**	165	0	0	170	58	0	**5**	0	63	0	88	**76**	0	**164**	0	0	0	0	0	**397**
08:00	4	136	0	0	140	62	0	2	0	64	0	81	52	0	133	0	0	0	0	0	337
Total Volume	15	628	0	0	643	236	0	14	0	250	0	349	243	0	592	0	0	0	0	0	1485
% App. Total	2.3	97.7	0	0		94.4	0	5.6	0		0	59	41	0		0	0	0	0		
PHF	.750	.908	.000	.000	.908	.937	.000	.700	.000	.947	.000	.909	.799	.000	.902	.000	.000	.000	.000	.000	.935
Passenger Vehicles	15	599	0	0	614	236	0	12	0	248	0	328	231	0	559	0	0	0	0	0	1421
% Passenger Vehicles																					
Heavy Vehicles	0	22	0	0	22	0	0	0	0	0	0	18	5	0	23	0	0	0	0	0	45
% Heavy Vehicles	0	3.5	0	0	3.4	0	0	0	0	0	0	5.2	2.1	0	3.9	0	0	0	0	0	3.0
Buses	0	7	0	0	7	0	0	2	0	2	0	3	7	0	10	0	0	0	0	0	19
% Buses	0	1.1	0	0	1.1	0	0	14.3	0	0.8	0	0.9	2.9	0	1.7	0	0	0	0	0	1.3



735 Maryland St
Columbia, SC 29201
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File Name : SR 92 @ Demooney Rd
Site Code :
Start Date : 01/11/2024
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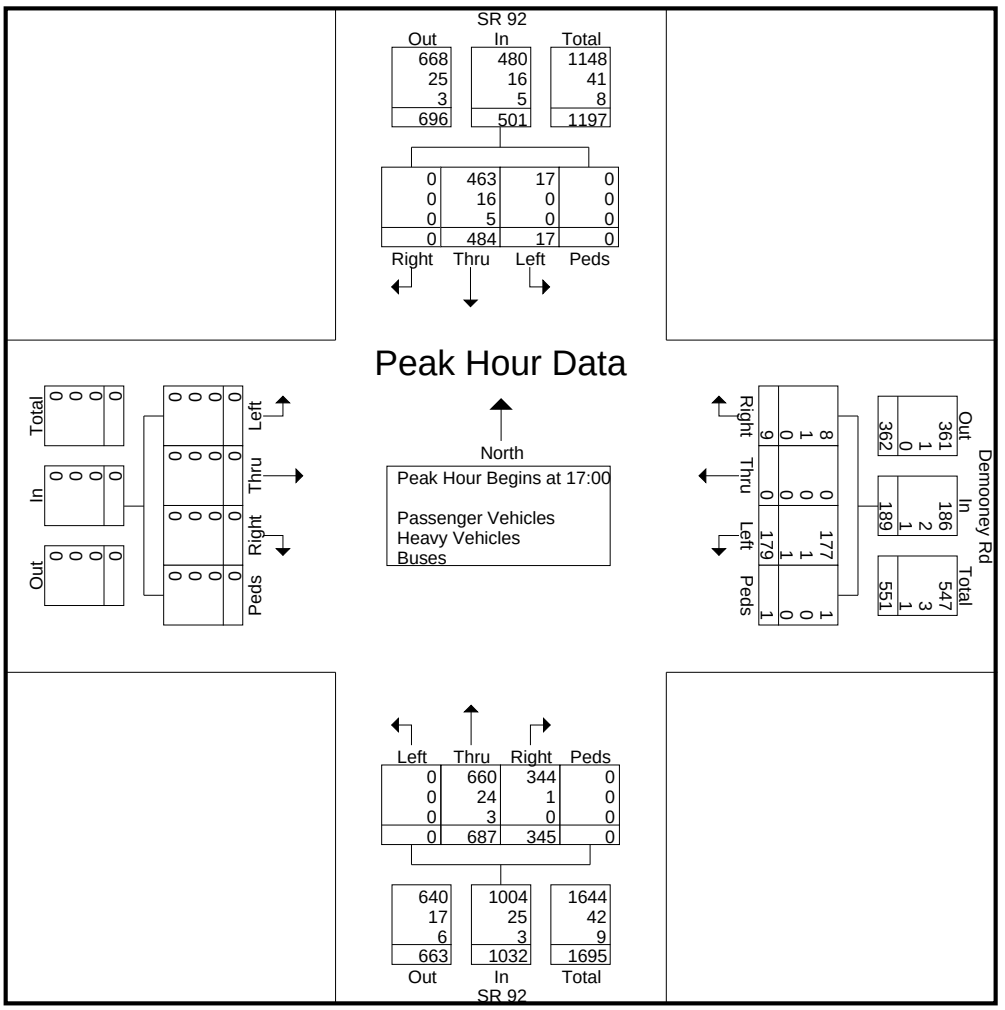
	SR 92 Southbound					Demooney Rd Westbound					SR 92 Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	3	118	0	0	121	**52**	0	1	**1**	**54**	0	157	**105**	0	262	0	0	0	0	0	437
17:15	3	**127**	0	0	**130**	46	0	1	0	47	0	**191**	79	0	**270**	0	0	0	0	0	**447**
17:30	**7**	114	0	0	121	35	0	3	0	38	0	178	88	0	266	0	0	0	0	0	425
17:45	4	125	0	0	129	46	0	**4**	0	50	0	161	73	0	234	0	0	0	0	0	413
Total Volume	17	484	0	0	501	179	0	9	1	189	0	687	345	0	1032	0	0	0	0	0	1722
% App. Total	3.4	96.6	0	0		94.7	0	4.8	0.5		0	66.6	33.4	0		0	0	0	0		
PHF	.607	.953	.000	.000	.963	.861	.000	.563	.250	.875	.000	.899	.821	.000	.956	.000	.000	.000	.000	.000	.963
Passenger Vehicles	17	463	0	0	480	177	0	8	1	186	0	660	344	0	1004	0	0	0	0	0	1670
% Passenger Vehicles																					
Heavy Vehicles	0	16	0	0	16	1	0	1	0	2	0	24	1	0	25	0	0	0	0	0	43
% Heavy Vehicles	0	3.3	0	0	3.2	0.6	0	11.1	0	1.1	0	3.5	0.3	0	2.4	0	0	0	0	0	2.5
Buses	0	5	0	0	5	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	9
% Buses	0	1.0	0	0	1.0	0.6	0	0	0	0.5	0	0.4	0	0	0.3	0	0	0	0	0	0.5



SHORT COUNTS
Traffic Data Specialists

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We Can't say we're the Best, but you Can!

File Name : SR 92 @ Hall Rd
Site Code :
Start Date : 01/11/2024
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 92 Southbound				Hall Rd Westbound				SR 92 Northbound				Hall Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	12	167	27	0	14	12	10	0	48	107	9	0	6	1	27	0	440
07:15	14	194	26	0	19	28	12	0	61	139	8	0	15	8	42	0	566
07:30	15	194	21	0	13	19	16	0	64	131	13	0	20	12	56	0	574
07:45	19	192	24	0	17	32	19	0	78	155	16	0	18	7	57	0	634
Total	60	747	98	0	63	91	57	0	251	532	46	0	59	28	182	0	2214
08:00	11	174	51	0	22	30	16	0	93	134	27	0	28	6	67	0	659
08:15	14	136	33	0	16	23	17	0	86	141	12	0	31	8	87	0	604
08:30	18	156	38	0	14	26	15	0	73	109	19	0	31	9	95	0	603
08:45	12	145	24	0	18	14	23	0	65	126	12	0	30	6	68	0	543
Total	55	611	146	0	70	93	71	0	317	510	70	0	120	29	317	0	2409
16:00	14	158	12	0	16	3	21	0	50	276	11	0	39	6	92	0	698
16:15	10	163	17	0	15	2	35	0	35	231	11	0	29	7	46	0	601
16:30	11	168	10	0	16	6	26	1	28	247	14	0	26	2	59	0	614
16:45	16	170	15	0	14	1	20	0	30	238	9	0	24	3	47	0	587
Total	51	659	54	0	61	12	102	1	143	992	45	0	118	18	244	0	2500
17:00	14	155	7	0	24	3	25	0	14	260	11	0	21	6	47	0	587
17:15	10	192	10	0	23	2	25	1	17	277	7	0	14	8	30	0	616
17:30	6	163	16	0	9	1	32	1	27	251	8	0	16	6	29	0	565
17:45	8	163	25	0	14	7	28	0	31	235	14	0	18	4	46	0	593
Total	38	673	58	0	70	13	110	2	89	1023	40	0	69	24	152	0	2361
Grand Total	204	2690	356	0	264	209	340	3	800	3057	201	0	366	99	895	0	9484
Apprch %	6.3	82.8	11	0	32.4	25.6	41.7	0.4	19.7	75.3	5	0	26.9	7.3	65.8	0	
Total %	2.2	28.4	3.8	0	2.8	2.2	3.6	0	8.4	32.2	2.1	0	3.9	1	9.4	0	
Passenger Vehicles	204	2596	343	0	263	200	338	3	735	2951	201	0	346	99	813	0	9092
% Passenger Vehicles	100	96.5	96.3	0	99.6	95.7	99.4	100	91.9	96.5	100	0	94.5	100	90.8	0	95.9
Heavy Vehicles	0	69	0	0	0	1	2	0	8	89	0	0	0	0	3	0	172
% Heavy Vehicles	0	2.6	0	0	0	0.5	0.6	0	1	2.9	0	0	0	0	0.3	0	1.8
Buses	0	25	13	0	1	8	0	0	57	17	0	0	20	0	79	0	220
% Buses	0	0.9	3.7	0	0.4	3.8	0	0	7.1	0.6	0	0	5.5	0	8.8	0	2.3

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Columbia, SC 29201
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File Name : SR 92 @ Hall Rd
Site Code :
Start Date : 01/11/2024
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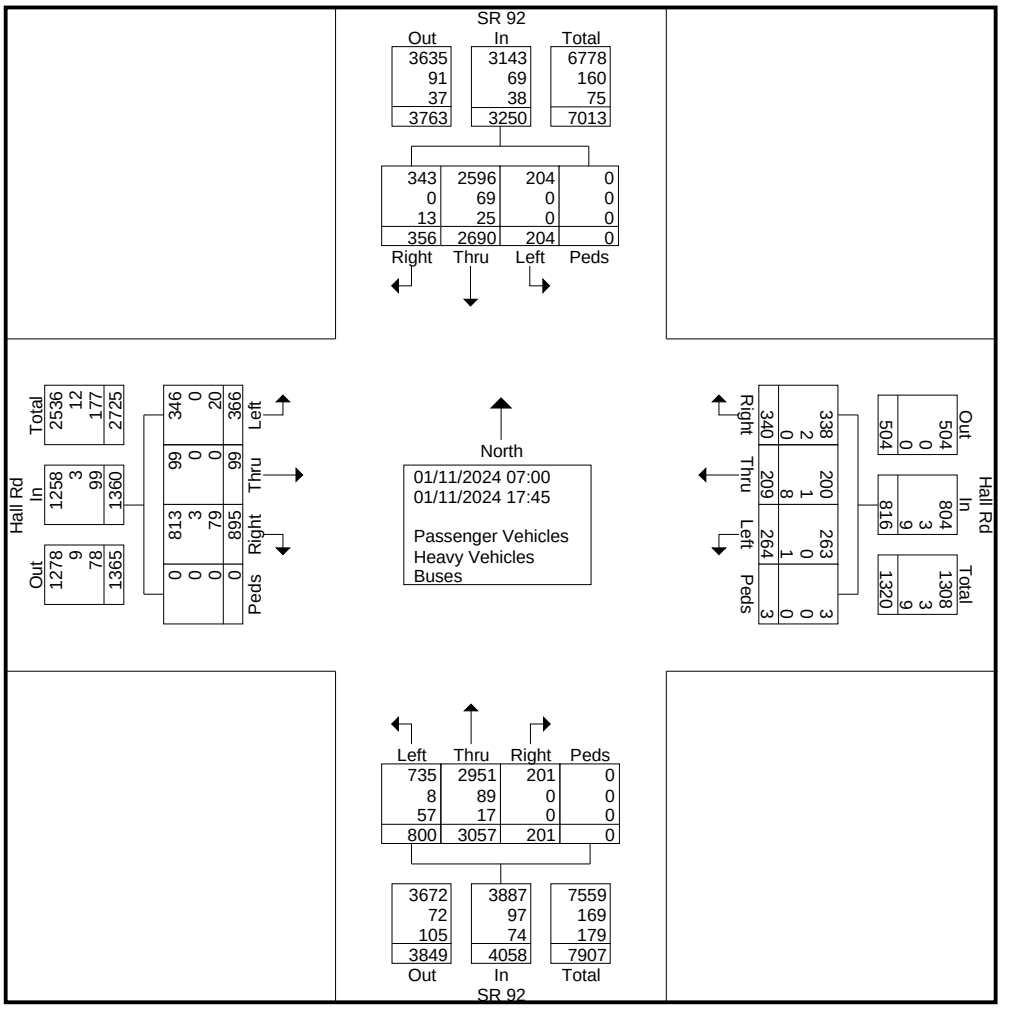

735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : SR 92 @ Hall Rd
Site Code :
Start Date : 01/11/2024
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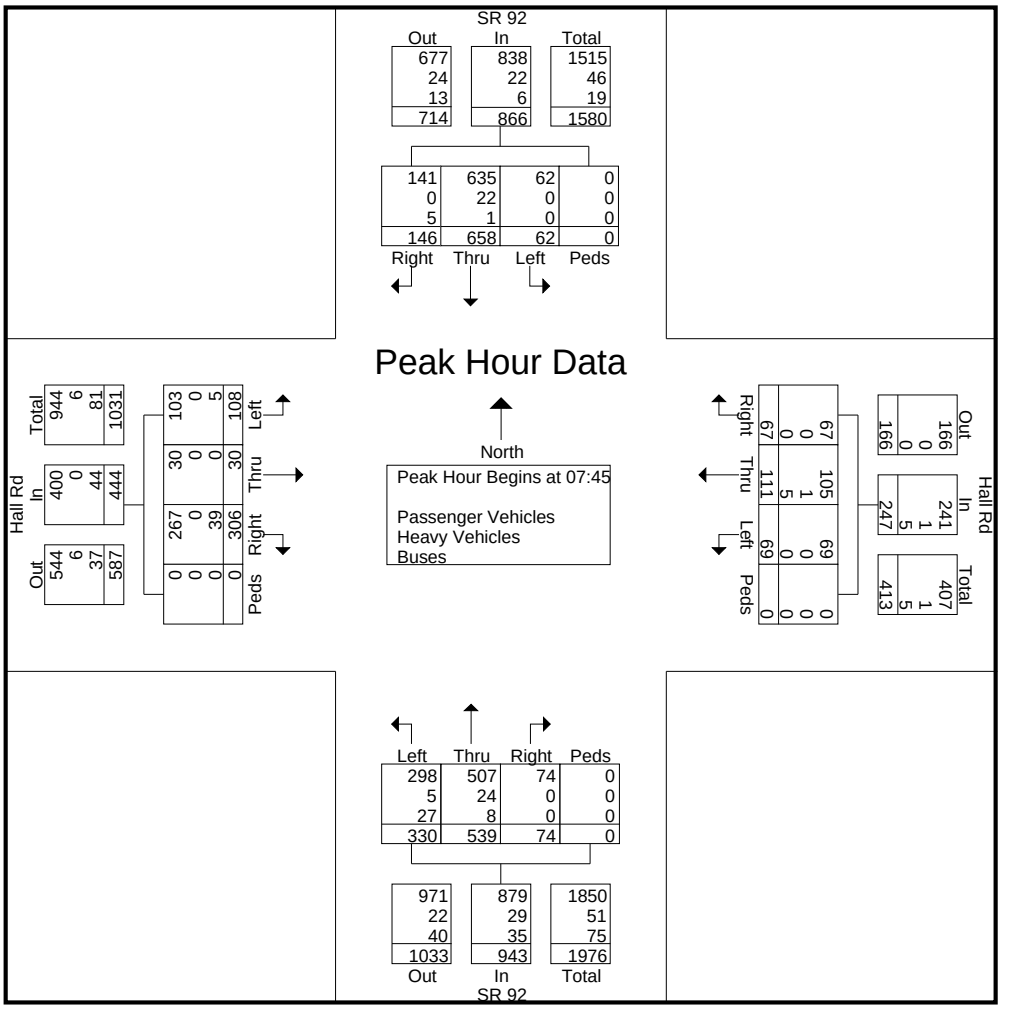
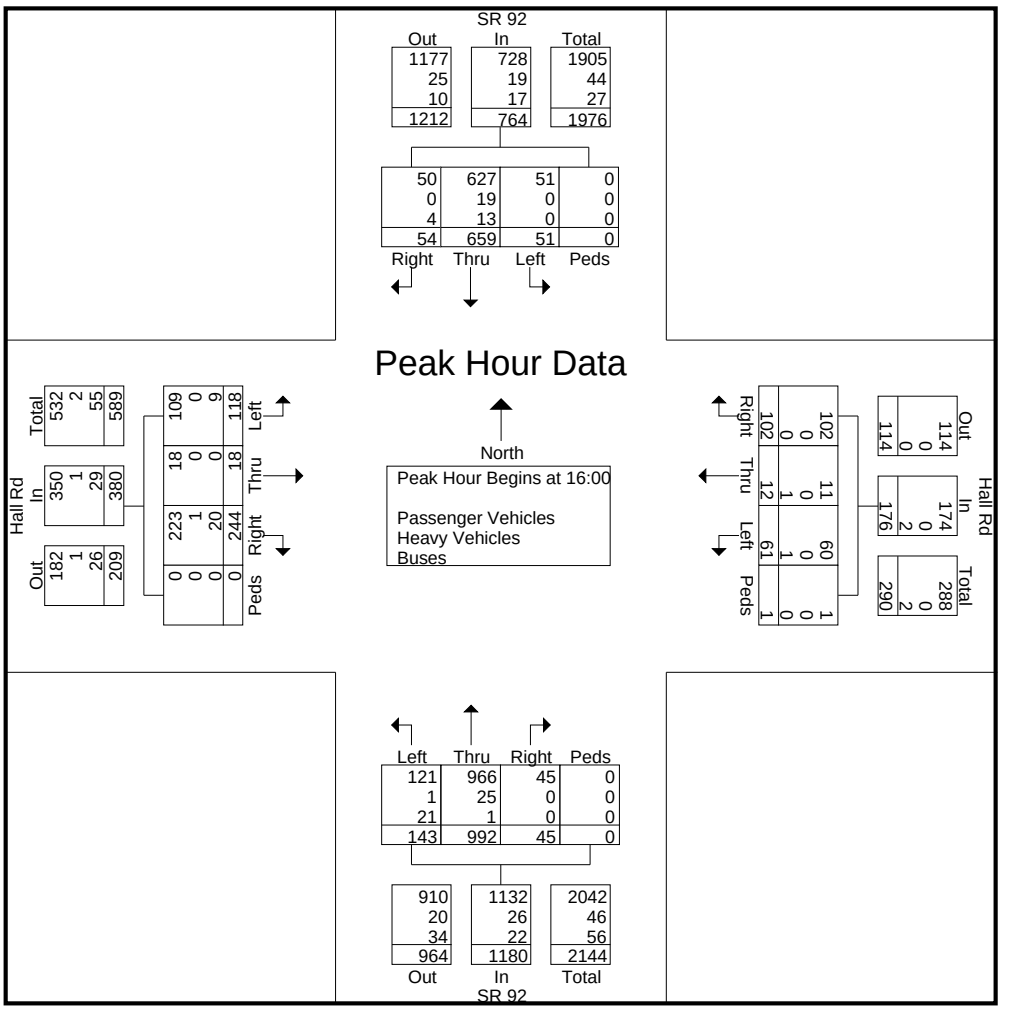
	SR 92 Southbound					Hall Rd Westbound					SR 92 Northbound					Hall Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	**19**	**192**	24	0	235	17	**32**	**19**	0	**68**	78	**155**	16	0	249	18	7	57	0	82	634
08:00	11	174	**51**	0	**236**	**22**	30	16	0	68	**93**	134	**27**	0	**254**	28	6	67	0	101	**659**
08:15	14	136	33	0	183	16	23	17	0	56	86	141	12	0	239	**31**	8	87	0	126	604
08:30	18	156	38	0	212	14	26	15	0	55	73	109	19	0	201	31	**9**	**95**	0	**135**	603
Total Volume	62	658	146	0	866	69	111	67	0	247	330	539	74	0	943	108	30	306	0	444	2500
% App. Total	7.2	76	16.9	0		27.9	44.9	27.1	0		35	57.2	7.8	0		24.3	6.8	68.9	0		
PHF	.816	.857	.716	.000	.917	.784	.867	.882	.000	.908	.887	.869	.685	.000	.928	.871	.833	.805	.000	.822	.948
Passenger Vehicles	62	635	141	0	838	69	105	67	0	241	298	507	74	0	879	103	30	267	0	400	2358
% Passenger Vehicles																					
Heavy Vehicles	0	22	0	0	22	0	1	0	0	1	5	24	0	0	29	0	0	0	0	0	52
% Heavy Vehicles	0	3.3	0	0	2.5	0	0.9	0	0	0.4	1.5	4.5	0	0	3.1	0	0	0	0	0	2.1
Buses	0	1	5	0	6	0	5	0	0	5	27	8	0	0	35	5	0	39	0	44	90
% Buses	0	0.2	3.4	0	0.7	0	4.5	0	0	2.0	8.2	1.5	0	0	3.7	4.6	0	12.7	0	9.9	3.6



735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Hall Rd
Site Code :
Start Date : 01/11/2024
Page No : 4

	SR 92 Southbound					Hall Rd Westbound					SR 92 Northbound					Hall Rd Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	14	158	12	0	184	**16**	3	21	0	40	**50**	**276**	11	0	**337**	**39**	6	**92**	0	**137**	**698**
16:15	10	163	**17**	0	190	15	2	**35**	0	**52**	35	231	11	0	277	29	**7**	46	0	82	601
16:30	11	168	10	0	189	16	**6**	26	**1**	49	28	247	**14**	0	289	26	2	59	0	87	614
16:45	**16**	**170**	15	0	**201**	14	1	20	0	35	30	238	9	0	277	24	3	47	0	74	587
Total Volume	51	659	54	0	764	61	12	102	1	176	143	992	45	0	1180	118	18	244	0	380	2500
% App. Total	6.7	86.3	7.1	0		34.7	6.8	58	0.6		12.1	84.1	3.8	0		31.1	4.7	64.2	0		
PHF	.797	.969	.794	.000	.950	.953	.500	.729	.250	.846	.715	.899	.804	.000	.875	.756	.643	.663	.000	.693	.895
Passenger Vehicles	51	627	50	0	728	60	11	102	1	174	121	966	45	0	1132	109	18	223	0	350	2384
% Passenger Vehicles																					
Heavy Vehicles	0	19	0	0	19	0	0	0	0	0	1	25	0	0	26	0	0	1	0	1	46
% Heavy Vehicles	0	2.9	0	0	2.5	0	0	0	0	0	0.7	2.5	0	0	2.2	0	0	0.4	0	0.3	1.8
Buses	0	13	4	0	17	1	1	0	0	2	21	1	0	0	22	9	0	20	0	29	70
% Buses	0	2.0	7.4	0	2.2	1.6	8.3	0	0	1.1	14.7	0.1	0	0	1.9	7.6	0	8.2	0	7.6	2.8



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Jones Rd
Site Code :
Start Date : 01/11/2024
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 92 Southbound				Jones Rd Westbound				SR 92 Northbound				Jones Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	14	186	6	0	14	1	2	0	0	106	9	0	0	0	0	0	338
07:15	16	233	11	0	17	2	2	0	0	141	15	0	1	0	0	0	438
07:30	10	223	11	0	8	3	7	0	0	161	20	0	0	2	0	0	445
07:45	13	218	9	0	9	3	4	0	4	147	23	0	0	0	0	0	430
Total	53	860	37	0	48	9	15	0	4	555	67	0	1	2	0	0	1651
08:00	22	200	13	0	18	6	4	0	6	150	21	0	0	1	0	0	441
08:15	5	181	11	0	12	4	5	0	7	160	25	0	2	2	0	0	414
08:30	6	210	9	0	13	2	3	0	4	133	21	0	2	0	0	0	403
08:45	3	161	6	0	12	0	1	0	1	150	18	0	6	1	0	0	359
Total	36	752	39	0	55	12	13	0	18	593	85	0	10	4	0	0	1617
16:00	5	171	4	0	8	2	6	1	0	292	34	0	1	0	0	0	524
16:15	5	190	3	0	15	0	6	0	0	301	23	0	0	0	0	0	543
16:30	4	166	3	0	11	2	8	0	1	285	21	0	0	3	1	1	506
16:45	3	191	4	0	20	3	9	0	0	227	30	0	0	0	0	0	487
Total	17	718	14	0	54	7	29	1	1	1105	108	0	1	3	1	1	2060
17:00	7	186	5	0	10	0	7	2	0	289	24	0	1	0	0	0	531
17:15	3	172	1	0	14	1	9	0	0	271	34	0	1	0	0	0	506
17:30	4	171	2	0	15	1	15	0	3	266	33	0	1	0	2	0	513
17:45	8	187	2	0	13	0	10	0	1	250	30	0	0	0	0	0	501
Total	22	716	10	0	52	2	41	2	4	1076	121	0	3	0	2	0	2051
Grand Total	128	3046	100	0	209	30	98	3	27	3329	381	0	15	9	3	1	7379
Apprch %	3.9	93	3.1	0	61.5	8.8	28.8	0.9	0.7	89.1	10.2	0	53.6	32.1	10.7	3.6	
Total %	1.7	41.3	1.4	0	2.8	0.4	1.3	0	0.4	45.1	5.2	0	0.2	0.1	0	0	
Passenger Vehicles	125	2928	86	0	209	24	92	3	22	3210	374	0	15	8	3	1	7100
% Passenger Vehicles	97.7	96.1	86	0	100	80	93.9	100	81.5	96.4	98.2	0	100	88.9	100	100	96.2
Heavy Vehicles	1	82	0	0	0	0	0	0	1	92	0	0	0	0	0	0	176
% Heavy Vehicles	0.8	2.7	0	0	0	0	0	0	3.7	2.8	0	0	0	0	0	0	2.4
Buses	2	36	14	0	0	6	6	0	4	27	7	0	0	1	0	0	103
% Buses	1.6	1.2	14	0	0	20	6.1	0	14.8	0.8	1.8	0	0	11.1	0	0	1.4

735 Maryland St
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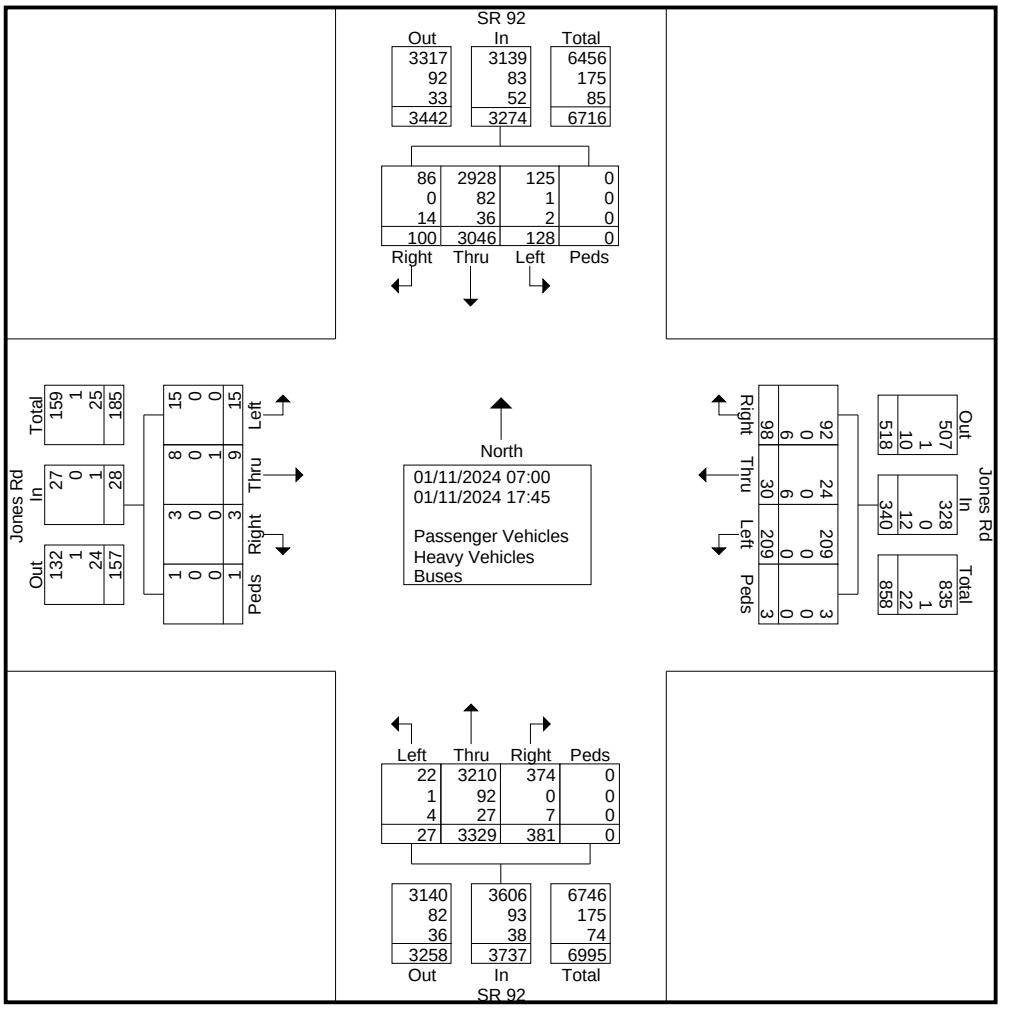
File Name : SR 92 @ Jones Rd
Site Code :
Start Date : 01/11/2024
Page No : 2



735 Maryland St
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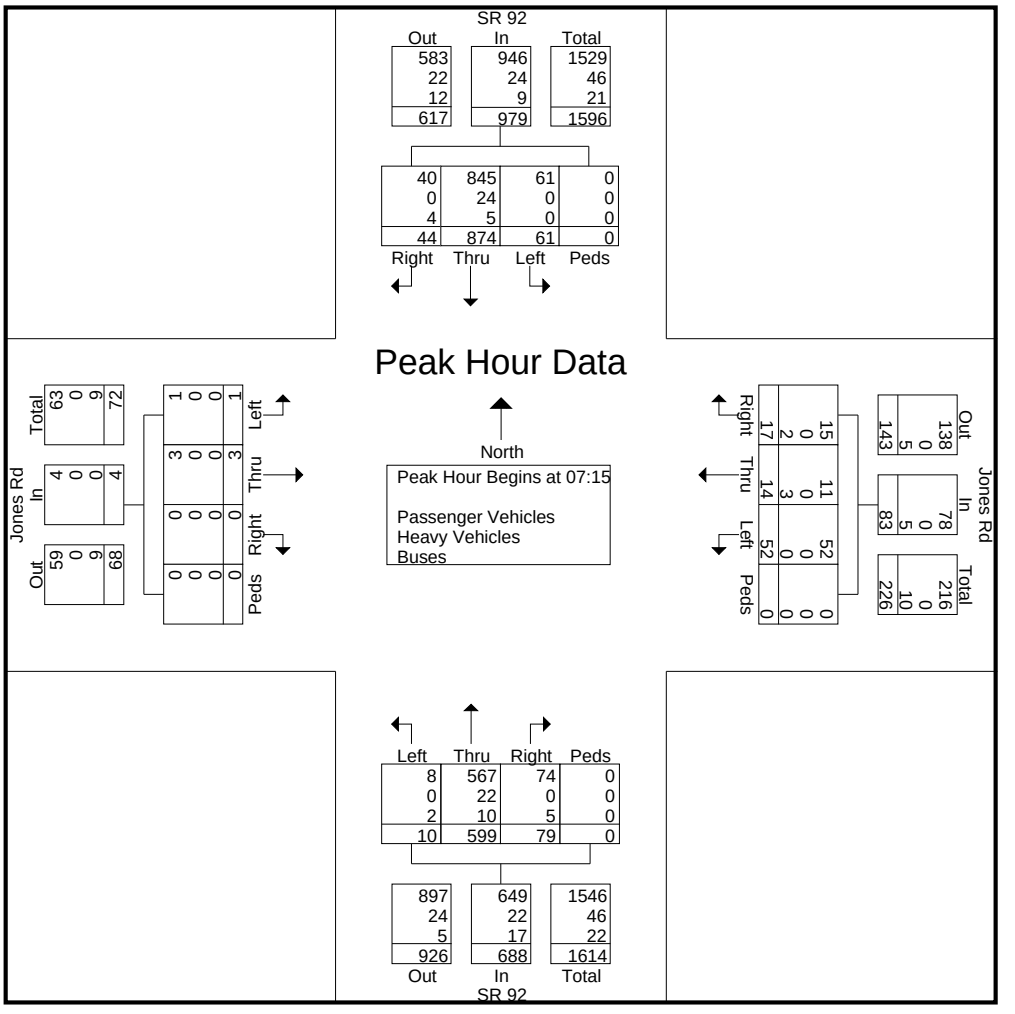
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Jones Rd
Site Code :
Start Date : 01/11/2024
Page No : 3

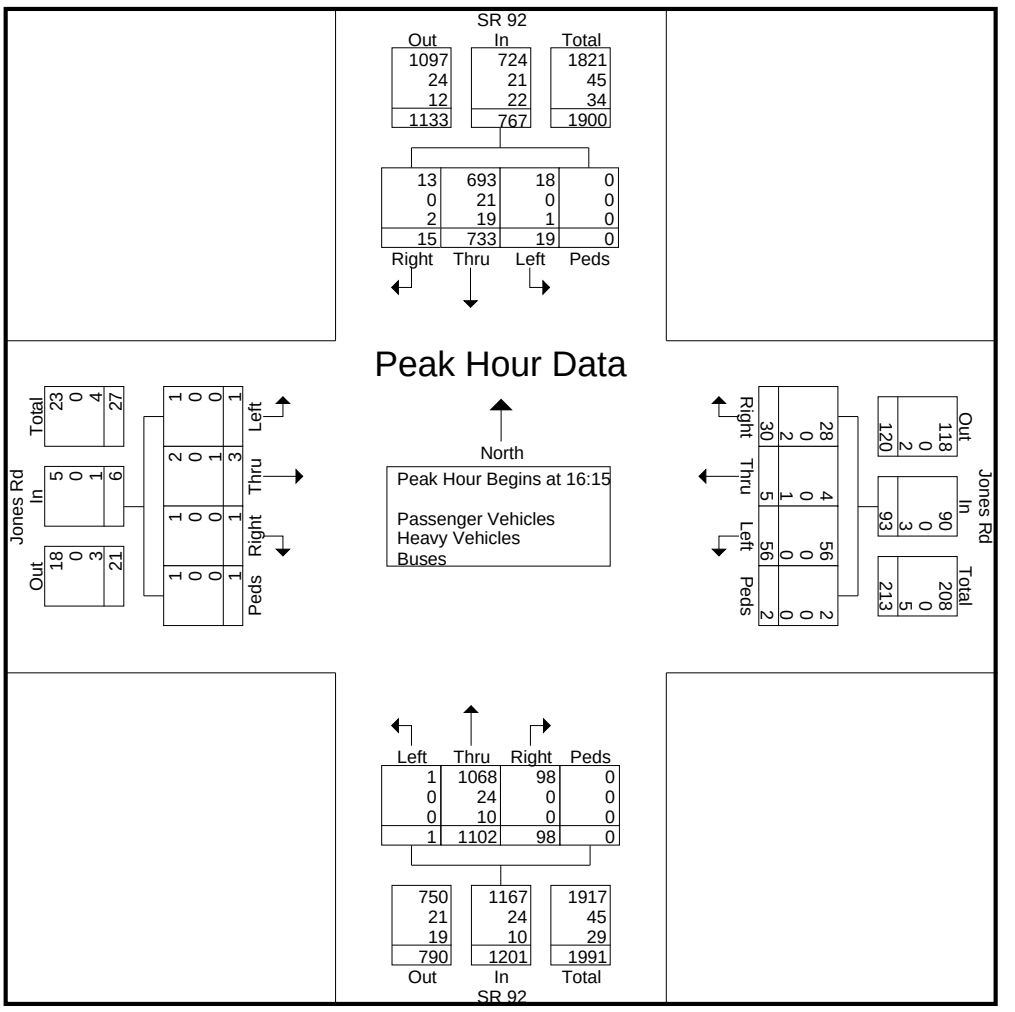
	SR 92 Southbound					Jones Rd Westbound					SR 92 Northbound					Jones Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	16	**233**	11	0	**260**	17	2	2	0	21	0	141	15	0	156	**1**	0	0	0	1	438
07:30	10	223	11	0	244	8	3	**7**	0	18	0	**161**	20	0	**181**	0	**2**	0	0	**2**	**445**
07:45	13	218	9	0	240	9	3	4	0	16	4	147	**23**	0	174	0	0	0	0	0	430
08:00	**22**	200	**13**	0	235	**18**	**6**	4	0	**28**	**6**	150	21	0	177	0	1	0	0	1	441
Total Volume	61	874	44	0	979	52	14	17	0	83	10	599	79	0	688	1	3	0	0	4	1754
% App. Total	6.2	89.3	4.5	0		62.7	16.9	20.5	0		1.5	87.1	11.5	0		25	75	0	0		
PHF	.693	.938	.846	.000	.941	.722	.583	.607	.000	.741	.417	.930	.859	.000	.950	.250	.375	.000	.000	.500	.985
Passenger Vehicles	61	845	40	0	946	52	11	15	0	78	8	567	74	0	649	1	3	0	0	4	1677
% Passenger Vehicles																					
Heavy Vehicles	0	24	0	0	24	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	46
% Heavy Vehicles	0	2.7	0	0	2.5	0	0	0	0	0	0	3.7	0	0	3.2	0	0	0	0	0	2.6
Buses	0	5	4	0	9	0	3	2	0	5	2	10	5	0	17	0	0	0	0	0	31
% Buses	0	0.6	9.1	0	0.9	0	21.4	11.8	0	6.0	20.0	1.7	6.3	0	2.5	0	0	0	0	0	1.8



735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Jones Rd
Site Code :
Start Date : 01/11/2024
Page No : 4

	SR 92 Southbound					Jones Rd Westbound					SR 92 Northbound					Jones Rd Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	5	190	3	0	**198**	15	0	6	0	21	0	**301**	23	0	**324**	0	0	0	0	0	**543**
16:30	4	166	3	0	173	11	2	8	0	21	**1**	285	21	0	307	0	**3**	**1**	**1**	**5**	506
16:45	3	**191**	4	0	198	**20**	**3**	**9**	0	**32**	0	227	**30**	0	257	0	0	0	0	0	487
17:00	**7**	186	**5**	0	198	10	0	7	**2**	19	0	289	24	0	313	**1**	0	0	0	1	531
Total Volume	19	733	15	0	767	56	5	30	2	93	1	1102	98	0	1201	1	3	1	1	6	2067
% App. Total	2.5	95.6	2	0		60.2	5.4	32.3	2.2		0.1	91.8	8.2	0		16.7	50	16.7	16.7		
PHF	.679	.959	.750	.000	.968	.700	.417	.833	.250	.727	.250	.915	.817	.000	.927	.250	.250	.250	.250	.300	.952
Passenger Vehicles	18	693	13	0	724	56	4	28	2	90	1	1068									
% Passenger Vehicles	94.7	94.5	86.7	0	94.4	100	80.0	93.3	100	96.8	100	96.9	100	0	97.2	100	66.7	100	100	83.3	96.1
Heavy Vehicles	0	21	0	0	21	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	45
% Heavy Vehicles	0	2.9	0	0	2.7	0	0	0	0	0	0	2.2	0	0	2.0	0	0	0	0	0	2.2
Buses	1	19	2	0	22	0	1	2	0	3	0	10	0	0	10	0	1	0	0	1	36
% Buses	5.3	2.6	13.3	0	2.9	0	20.0	6.7	0	3.2	0	0.9	0	0	0.8	0	33.3	0	0	16.7	1.7



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Ridge-Butner Rd
Site Code :
Start Date : 01/11/2024
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 92 Southbound				Butner Rd Westbound				SR 92 Northbound				Ridge Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	5	116	2	0	4	3	8	0	3	54	9	0	0	7	4	0	215
07:15	16	147	2	0	11	9	5	0	11	77	9	0	2	10	7	0	306
07:30	10	120	6	0	6	16	16	0	11	73	5	0	6	8	7	0	284
07:45	15	129	10	0	10	20	15	0	12	74	7	0	2	16	11	0	321
Total	46	512	20	0	31	48	44	0	37	278	30	0	10	41	29	0	1126
08:00	13	106	9	0	16	12	2	0	10	72	6	0	9	19	13	0	287
08:15	18	93	3	0	8	12	4	0	6	67	5	0	5	8	6	0	235
08:30	8	119	3	0	12	5	7	0	5	65	11	0	3	9	7	0	254
08:45	11	91	1	0	11	2	2	0	9	53	4	0	1	3	8	0	196
Total	50	409	16	0	47	31	15	0	30	257	26	0	18	39	34	0	972
16:00	8	78	3	0	23	5	15	0	6	183	5	0	4	8	8	0	346
16:15	8	92	0	0	15	7	16	0	7	178	7	0	2	6	10	0	348
16:30	9	81	4	0	16	16	15	1	6	153	7	0	2	7	6	0	323
16:45	11	100	5	0	17	9	22	0	7	116	7	0	0	19	6	0	319
Total	36	351	12	0	71	37	68	1	26	630	26	0	8	40	30	0	1336
17:00	10	95	5	0	14	11	14	0	7	125	8	0	1	9	6	0	305
17:15	5	92	2	0	21	12	22	0	7	148	7	0	2	2	7	0	327
17:30	7	82	3	0	20	14	19	0	13	140	8	0	3	9	8	0	326
17:45	9	108	5	0	9	19	16	0	11	147	10	0	3	9	4	0	350
Total	31	377	15	0	64	56	71	0	38	560	33	0	9	29	25	0	1308
Grand Total	163	1649	63	0	213	172	198	1	131	1725	115	0	45	149	118	0	4742
Apprch %	8.7	87.9	3.4	0	36.5	29.5	33.9	0.2	6.6	87.5	5.8	0	14.4	47.8	37.8	0	
Total %	3.4	34.8	1.3	0	4.5	3.6	4.2	0	2.8	36.4	2.4	0	0.9	3.1	2.5	0	
Passenger Vehicles	162	1558	62	0	195	163	198	1	127	1636	112	0	44	143	114	0	4515
% Passenger Vehicles	99.4	94.5	98.4	0	91.5	94.8	100	100	96.9	94.8	97.4	0	97.8	96	96.6	0	95.2
Heavy Vehicles	1	82	0	0	1	3	0	0	1	85	1	0	0	2	1	0	177
% Heavy Vehicles	0.6	5	0	0	0.5	1.7	0	0	0.8	4.9	0.9	0	0	1.3	0.8	0	3.7
Buses	0	9	1	0	17	6	0	0	3	4	2	0	1	4	3	0	50
% Buses	0	0.5	1.6	0	8	3.5	0	0	2.3	0.2	1.7	0	2.2	2.7	2.5	0	1.1

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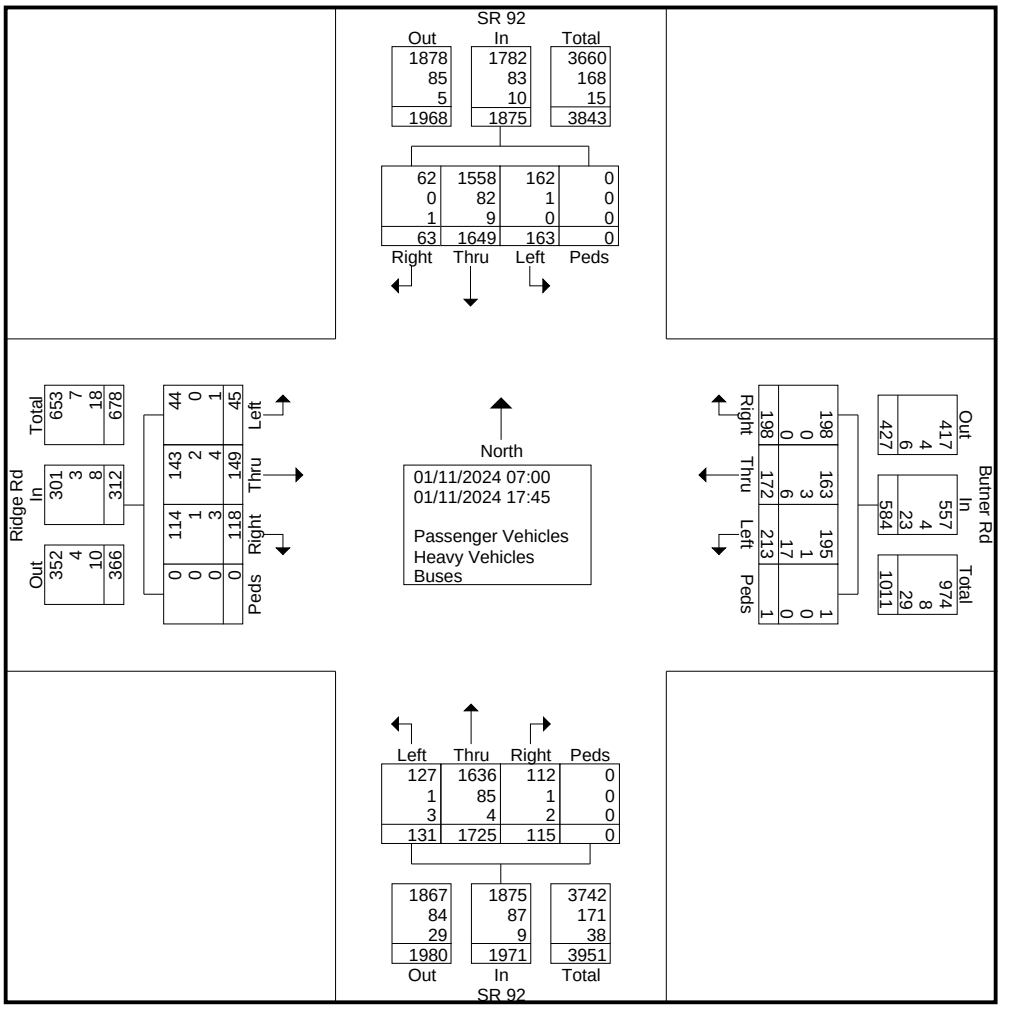
File Name : SR 92 @ Ridge-Butner Rd
Site Code :
Start Date : 01/11/2024
Page No : 2



735 Maryland St
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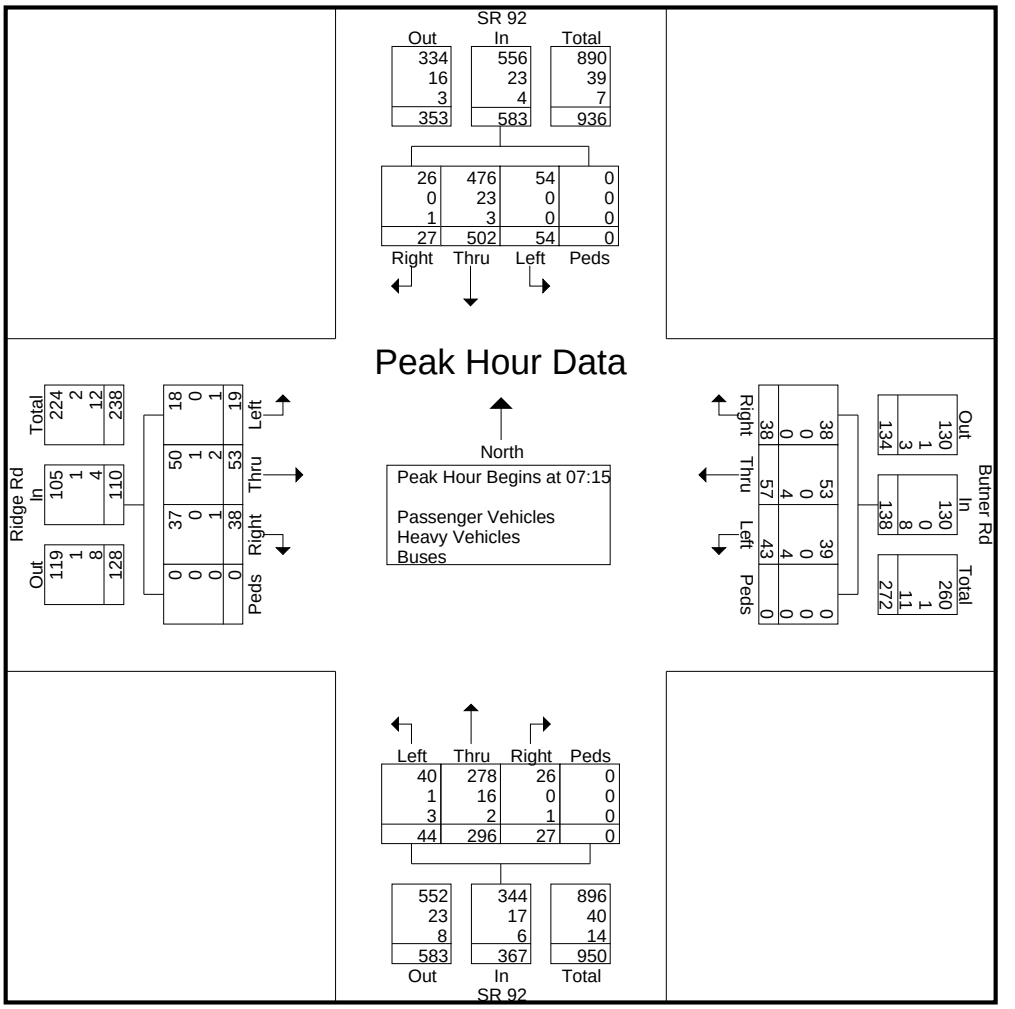
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Ridge-Butner Rd
Site Code :
Start Date : 01/11/2024
Page No : 3

	SR 92 Southbound					Butner Rd Westbound					SR 92 Northbound					Ridge Rd Eastbound					
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 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	**16**	**147**	2	0	**165**	11	9	5	0	25	11	**77**	**9**	0	**97**	2	10	7	0	19	306
07:30	10	120	6	0	136	6	16	**16**	0	38	11	73	5	0	89	6	8	7	0	21	284
07:45	15	129	**10**	0	154	10	**20**	15	0	**45**	**12**	74	7	0	93	2	16	11	0	29	**321**
08:00	13	106	9	0	128	**16**	12	2	0	30	10	72	6	0	88	**9**	**19**	**13**	0	**41**	287
Total Volume	54	502	27	0	583	43	57	38	0	138	44	296	27	0	367	19	53	38	0	110	1198
% App. Total	9.3	86.1	4.6	0		31.2	41.3	27.5	0		12	80.7	7.4	0		17.3	48.2	34.5	0		
PHF	.844	.854	.675	.000	.883	.672	.713	.594	.000	.767	.917	.961	.750	.000	.946	.528	.697	.731	.000	.671	.933
Passenger Vehicles	54	476	26	0	556	39	53	38	0	130	40	278	26	0	344	18	50	37	0	105	1135
% Passenger Vehicles																					
Heavy Vehicles	0	23	0	0	23	0	0	0	0	0	1	16	0	0	17	0	1	0	0	1	41
% Heavy Vehicles	0	4.6	0	0	3.9	0	0	0	0	0	2.3	5.4	0	0	4.6	0	1.9	0	0	0.9	3.4
Buses	0	3	1	0	4	4	4	0	0	8	3	2	1	0	6	1	2	1	0	4	22
% Buses	0	0.6	3.7	0	0.7	9.3	7.0	0	0	5.8	6.8	0.7	3.7	0	1.6	5.3	3.8	2.6	0	3.6	1.8



735 Maryland St
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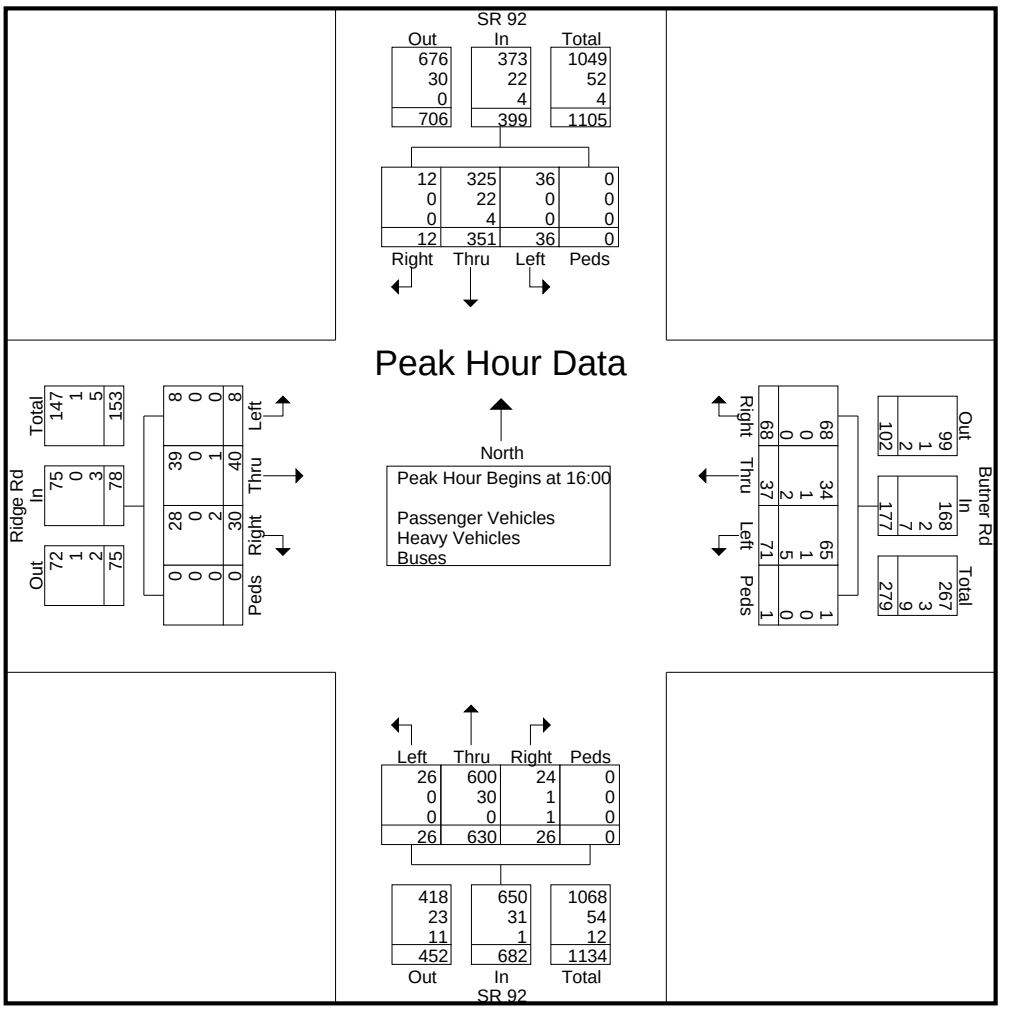
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Ridge-Butner Rd
Site Code :
Start Date : 01/11/2024
Page No : 4

	SR 92 Southbound					Butner Rd Westbound					SR 92 Northbound					Ridge Rd Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	8	78	3	0	89	**23**	5	15	0	43	6	**183**	5	0	**194**	**4**	8	8	0	20	346
16:15	8	92	0	0	100	15	7	16	0	38	**7**	178	**7**	0	192	2	6	**10**	0	18	**348**
16:30	9	81	4	0	94	16	**16**	15	**1**	**48**	6	153	7	0	166	2	7	6	0	15	323
16:45	**11**	**100**	**5**	0	**116**	17	9	**22**	0	48	7	116	7	0	130	0	**19**	6	0	**25**	319
Total Volume	36	351	12	0	399	71	37	68	1	177	26	630	26	0	682	8	40	30	0	78	1336
% App. Total	9	88	3	0		40.1	20.9	38.4	0.6		3.8	92.4	3.8	0		10.3	51.3	38.5	0		
PHF	.818	.878	.600	.000	.860	.772	.578	.773	.250	.922	.929	.861	.929	.000	.879	.500	.526	.750	.000	.780	.960
Passenger Vehicles	36	325	12	0	373	65	34	68	1	168	26	600	24	0	650	8	39	28	0	75	1266
% Passenger Vehicles																					
Heavy Vehicles	0	22	0	0	22	1	1	0	0	2	0	30	1	0	31	0	0	0	0	0	55
% Heavy Vehicles	0	6.3	0	0	5.5	1.4	2.7	0	0	1.1	0	4.8	3.8	0	4.5	0	0	0	0	0	4.1
Buses	0	4	0	0	4	5	2	0	0	7	0	0	1	0	1	0	1	2	0	3	15
% Buses	0	1.1	0	0	1.0	7.0	5.4	0	0	4.0	0	0	3.8	0	0.1	0	2.5	6.7	0	3.8	1.1



SHORT COUNTS
Traffic Data Specialists

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 92 @ Thompson Rd
Site Code :
Start Date : 01/11/2024
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 92 Southbound				Thompson Rd Westbound				SR 92 Northbound				Thompson Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	8	173	0	0	30	1	7	0	18	168	15	0	0	0	8	0	428
07:15	9	247	0	0	31	1	12	0	32	198	15	0	0	0	11	0	556
07:30	12	254	0	0	44	1	15	0	32	218	21	0	1	3	23	0	624
07:45	16	238	1	0	53	2	13	0	41	241	33	0	1	0	17	0	656
Total	45	912	1	0	158	5	47	0	123	825	84	0	2	3	59	0	2264
08:00	19	257	2	0	43	4	16	0	37	241	36	0	0	1	16	0	672
08:15	16	216	2	0	41	2	17	0	31	264	30	0	2	5	23	0	649
08:30	23	228	2	0	50	4	17	0	28	201	35	0	2	3	31	0	624
08:45	11	233	0	0	63	1	16	0	9	182	24	0	0	2	20	0	561
Total	69	934	6	0	197	11	66	0	105	888	125	0	4	11	90	0	2506
16:00	28	222	0	0	69	3	30	0	11	316	22	0	3	3	34	0	741
16:15	39	203	0	0	72	0	21	0	11	263	32	0	2	3	29	0	675
16:30	25	212	0	0	61	1	23	0	17	282	28	0	2	3	11	0	665
16:45	38	185	0	0	86	0	13	0	20	253	21	0	0	1	13	0	630
Total	130	822	0	0	288	4	87	0	59	1114	103	0	7	10	87	0	2711
17:00	29	196	1	0	80	0	17	1	16	281	28	0	0	1	15	0	665
17:15	34	220	1	0	70	0	29	1	19	301	30	0	1	0	8	0	714
17:30	41	161	0	0	87	3	29	1	8	253	24	2	0	1	13	0	623
17:45	32	184	0	0	63	0	29	0	17	275	33	0	1	1	13	0	648
Total	136	761	2	0	300	3	104	3	60	1110	115	2	2	3	49	0	2650
Grand Total	380	3429	9	0	943	23	304	3	347	3937	427	2	15	27	285	0	10131
Apprch %	10	89.8	0.2	0	74.1	1.8	23.9	0.2	7.4	83.5	9.1	0	4.6	8.3	87.2	0	
Total %	3.8	33.8	0.1	0	9.3	0.2	3	0	3.4	38.9	4.2	0	0.1	0.3	2.8	0	
Passenger Vehicles	375	3237	7	0	926	22	300	3	329	3756	410	2	14	27	262	0	9670
% Passenger Vehicles	98.7	94.4	77.8	0	98.2	95.7	98.7	100	94.8	95.4	96	100	93.3	100	91.9	0	95.4
Heavy Vehicles	1	89	2	0	13	1	2	0	18	103	11	0	1	0	22	0	263
% Heavy Vehicles	0.3	2.6	22.2	0	1.4	4.3	0.7	0	5.2	2.6	2.6	0	6.7	0	7.7	0	2.6
Buses	4	103	0	0	4	0	2	0	0	78	6	0	0	0	1	0	198
% Buses	1.1	3	0	0	0.4	0	0.7	0	0	2	1.4	0	0	0	0.4	0	2

735 Maryland St
Columbia, SC 29201
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File Name : SR 92 @ Thompson Rd
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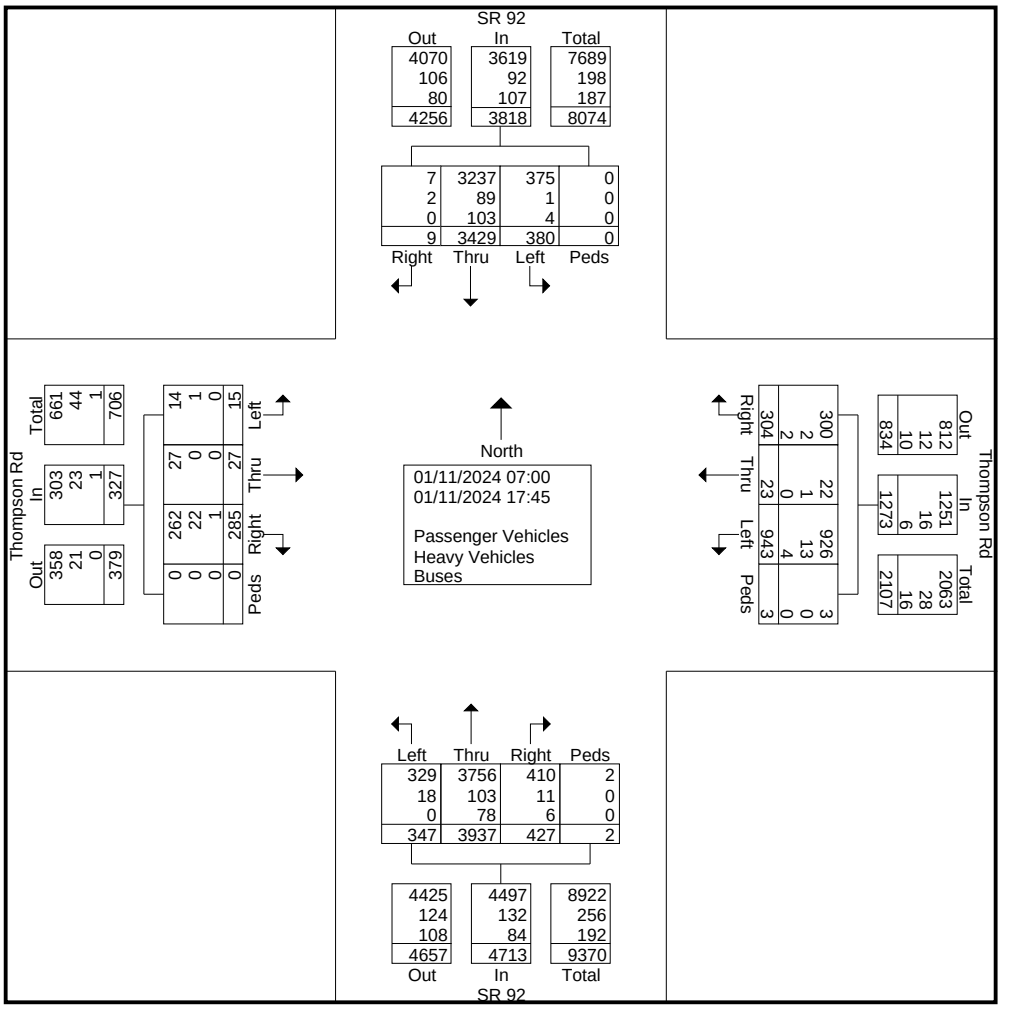

735 Maryland St
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File Name : SR 92 @ Thompson Rd
Site Code :
Start Date : 01/11/2024
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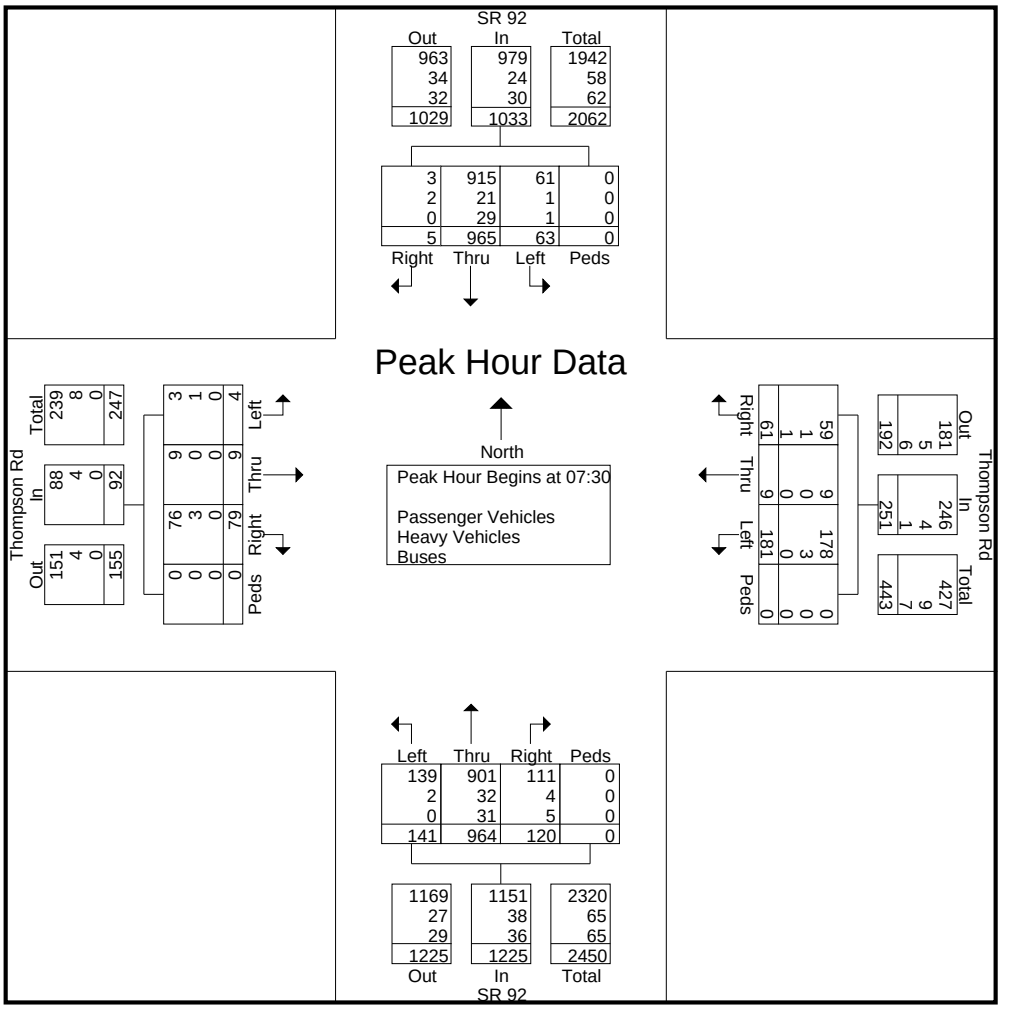
	SR 92 Southbound					Thompson Rd Westbound					SR 92 Northbound					Thompson Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	12	254	0	0	266	44	1	15	0	60	32	218	21	0	271	1	3	**23**	0	27	624
07:45	16	238	1	0	255	**53**	2	13	0	**68**	**41**	241	33	0	315	1	0	17	0	18	656
08:00	**19**	**257**	**2**	0	**278**	43	**4**	16	0	63	37	241	**36**	0	314	0	1	16	0	17	**672**
08:15	16	216	2	0	234	41	2	**17**	0	60	31	**264**	30	0	**325**	**2**	**5**	23	0	**30**	649
Total Volume	63	965	5	0	1033	181	9	61	0	251	141	964	120	0	1225	4	9	79	0	92	2601
% App. Total	6.1	93.4	0.5	0		72.1	3.6	24.3	0		11.5	78.7	9.8	0		4.3	9.8	85.9	0		
PHF	.829	.939	.625	.000	.929	.854	.563	.897	.000	.923	.860	.913	.833	.000	.942	.500	.450	.859	.000	.767	.968
Passenger Vehicles	61	915	3	0	979	178	9	59	0	246	139	901	111	0	1151	3	9	76	0	88	2464
% Passenger Vehicles																					
Heavy Vehicles	1	21	2	0	24	3	0	1	0	4	2	32	4	0	38	1	0	3	0	4	70
% Heavy Vehicles	1.6	2.2	40.0	0	2.3	1.7	0	1.6	0	1.6	1.4	3.3	3.3	0	3.1	25.0	0	3.8	0	4.3	2.7
Buses	1	29	0	0	30	0	0	1	0	1	0	31	5	0	36	0	0	0	0	0	67
% Buses	1.6	3.0	0	0	2.9	0	0	1.6	0	0.4	0	3.2	4.2	0	2.9	0	0	0	0	0	2.6



735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : SR 92 @ Thompson Rd
Site Code :
Start Date : 01/11/2024
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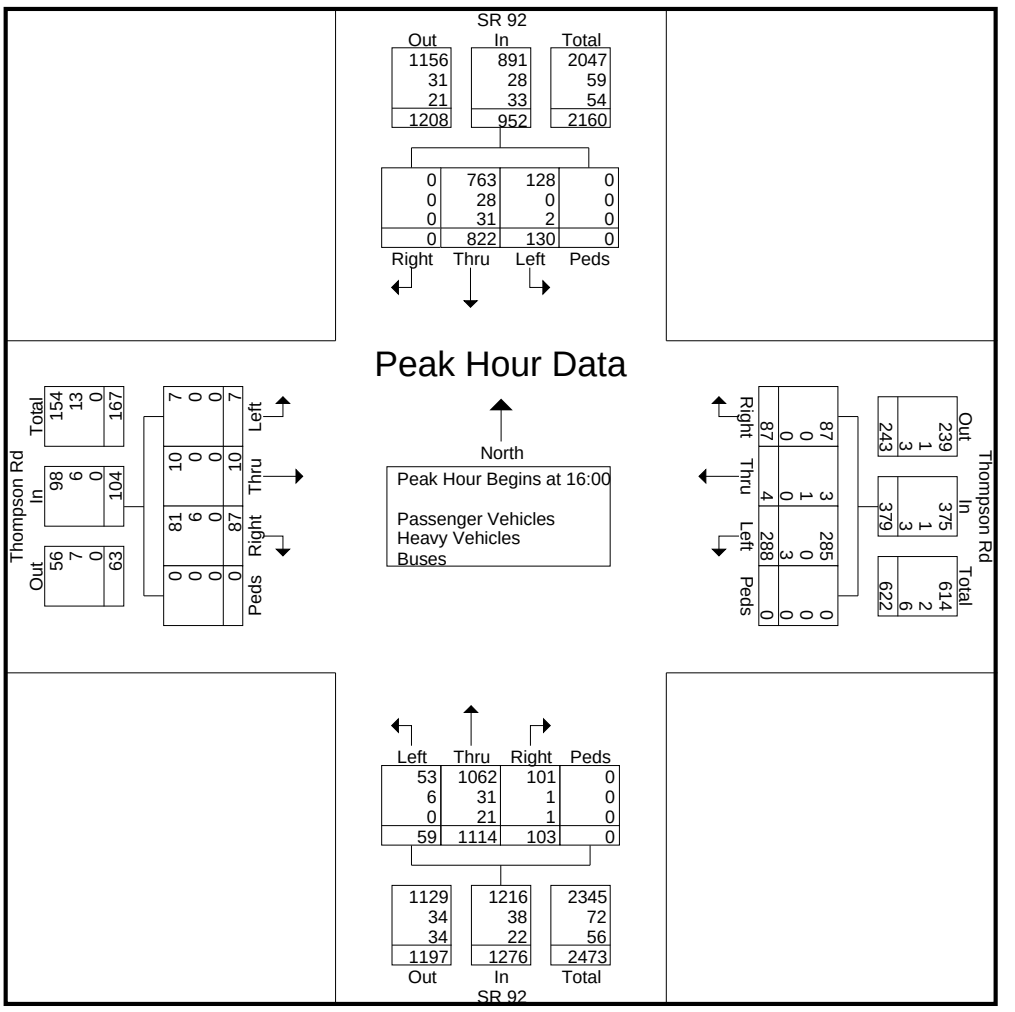
	SR 92 Southbound					Thompson Rd Westbound					SR 92 Northbound					Thompson Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	28	**222**	0	0	**250**	69	**3**	**30**	0	**102**	11	**316**	22	0	**349**	**3**	**3**	**34**	0	**40**	**741**
16:15	**39**	203	0	0	242	72	0	21	0	93	11	263	**32**	0	306	2	3	29	0	34	675
16:30	25	212	0	0	237	61	1	23	0	85	17	282	28	0	327	2	3	11	0	16	665
16:45	38	185	0	0	223	**86**	0	13	0	99	**20**	253	21	0	294	0	1	13	0	14	630
Total Volume	130	822	0	0	952	288	4	87	0	379	59	1114	103	0	1276	7	10	87	0	104	2711
% App. Total	13.7	86.3	0	0		76	1.1	23	0		4.6	87.3	8.1	0		6.7	9.6	83.7	0		
PHF	.833	.926	.000	.000	.952	.837	.333	.725	.000	.929	.738	.881	.805	.000	.914	.583	.833	.640	.000	.650	.915
Passenger Vehicles	128	763	0	0	891	285	3	87	0	375	53	1062									
% Passenger Vehicles	98.5	92.8	0	0	93.6	99.0	75.0	100	0	98.9	89.8	95.3	98.1	0	95.3	100	100	93.1	0	94.2	95.2
Heavy Vehicles	0	28	0	0	28	0	1	0	0	1	6	31	1	0	38	0	0	6	0	6	73
% Heavy Vehicles	0	3.4	0	0	2.9	0	25.0	0	0	0.3	10.2	2.8	1.0	0	3.0	0	0	6.9	0	5.8	2.7
Buses	2	31	0	0	33	3	0	0	0	3	0	21	1	0	22	0	0	0	0	0	58
% Buses	1.5	3.8	0	0	3.5	1.0	0	0	0	0.8	0	1.9	1.0	0	1.7	0	0	0	0	0	2.1



735 Maryland St
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We Can't say we're the Best, but you Can!

File Name : SR 154 @ SR 92
Site Code :
Start Date : 01/11/2024
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 92 Southbound				SR 154 Westbound				SR 92 Northbound				SR 154 Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	45	148	32	0	4	12	6	0	1	58	7	0	37	43	4	0	397
07:15	65	130	47	0	10	25	13	0	6	61	7	0	52	53	8	0	477
07:30	52	118	37	0	9	47	6	0	3	76	9	0	51	66	4	0	478
07:45	65	142	38	0	11	39	18	0	6	88	8	0	41	50	6	0	512
Total	227	538	154	0	34	123	43	0	16	283	31	0	181	212	22	0	1864
08:00	44	102	39	0	9	40	17	0	3	63	9	0	59	76	6	0	467
08:15	49	114	54	0	4	27	14	0	3	65	13	0	47	52	5	0	447
08:30	45	113	37	0	5	33	14	0	4	66	10	0	39	38	5	0	409
08:45	46	92	25	0	4	30	9	0	3	49	7	0	33	44	4	0	346
Total	184	421	155	0	22	130	54	0	13	243	39	0	178	210	20	0	1669
16:00	25	75	47	0	18	56	35	0	3	142	10	0	56	44	0	0	511
16:15	19	81	52	0	20	67	30	0	0	155	6	0	55	49	2	0	536
16:30	14	77	47	0	12	50	39	0	1	157	3	0	50	43	3	0	496
16:45	12	101	50	0	15	67	41	0	2	147	7	0	70	37	3	0	552
Total	70	334	196	0	65	240	145	0	6	601	26	0	231	173	8	0	2095
17:00	14	96	55	0	11	67	39	0	3	171	4	0	49	39	0	0	548
17:15	16	81	63	0	12	67	65	0	3	141	8	0	62	44	1	0	563
17:30	19	88	65	0	19	85	40	0	2	153	8	0	50	35	3	0	567
17:45	13	83	37	0	21	49	40	0	3	161	2	0	63	34	4	0	510
Total	62	348	220	0	63	268	184	0	11	626	22	0	224	152	8	0	2188
Grand Total	543	1641	725	0	184	761	426	0	46	1753	118	0	814	747	58	0	7816
Apprch %	18.7	56.4	24.9	0	13.4	55.5	31.1	0	2.4	91.4	6.2	0	50.3	46.1	3.6	0	
Total %	6.9	21	9.3	0	2.4	9.7	5.5	0	0.6	22.4	1.5	0	10.4	9.6	0.7	0	
Passenger Vehicles	528	1582	683	0	152	669	415	0	46	1700	85	0	767	634	57	0	7318
% Passenger Vehicles	97.2	96.4	94.2	0	82.6	87.9	97.4	0	100	97	72	0	94.2	84.9	98.3	0	93.6
Heavy Vehicles	15	56	39	0	25	90	11	0	0	50	30	0	47	113	1	0	477
% Heavy Vehicles	2.8	3.4	5.4	0	13.6	11.8	2.6	0	0	2.9	25.4	0	5.8	15.1	1.7	0	6.1
Buses	0	3	3	0	7	2	0	0	0	3	3	0	0	0	0	0	21
% Buses	0	0.2	0.4	0	3.8	0.3	0	0	0	0.2	2.5	0	0	0	0	0	0.3

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File Name : SR 154 @ SR 92
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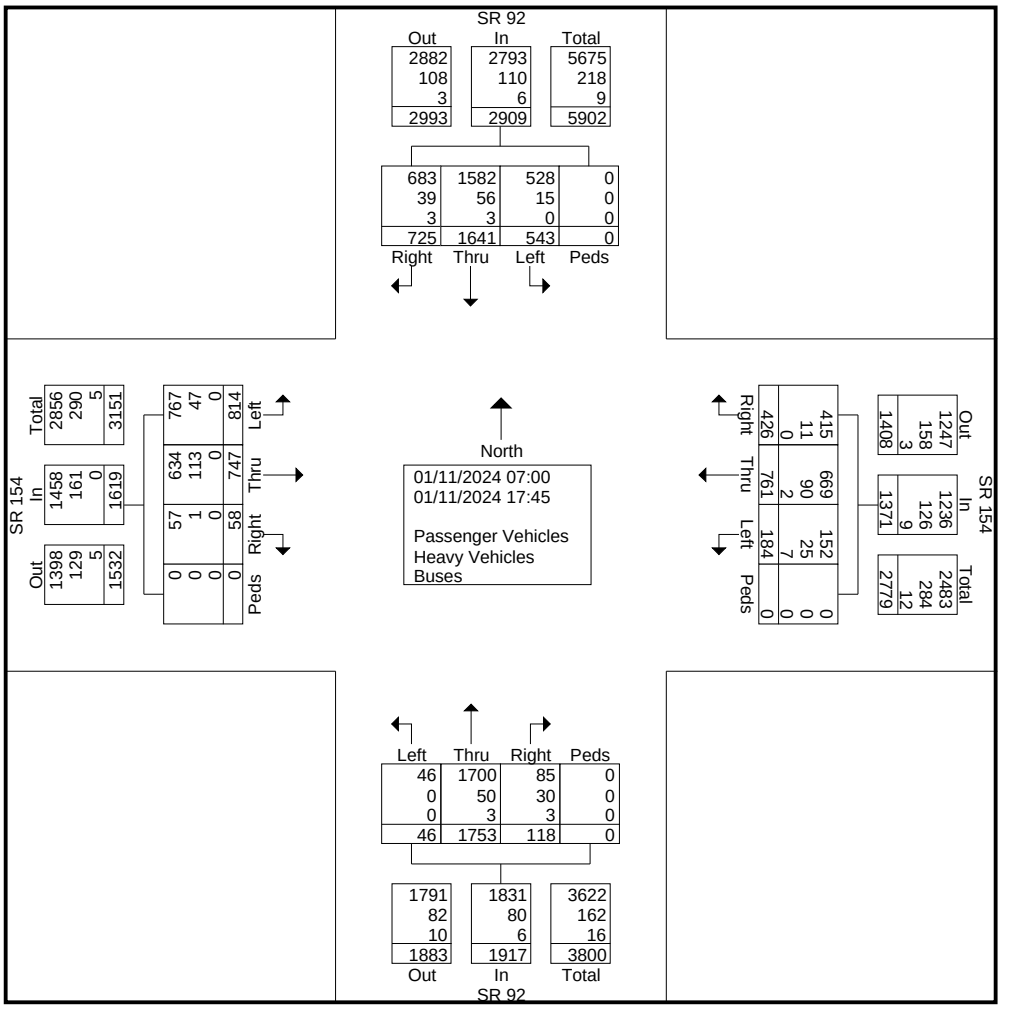

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File Name : SR 154 @ SR 92
Site Code :
Start Date : 01/11/2024
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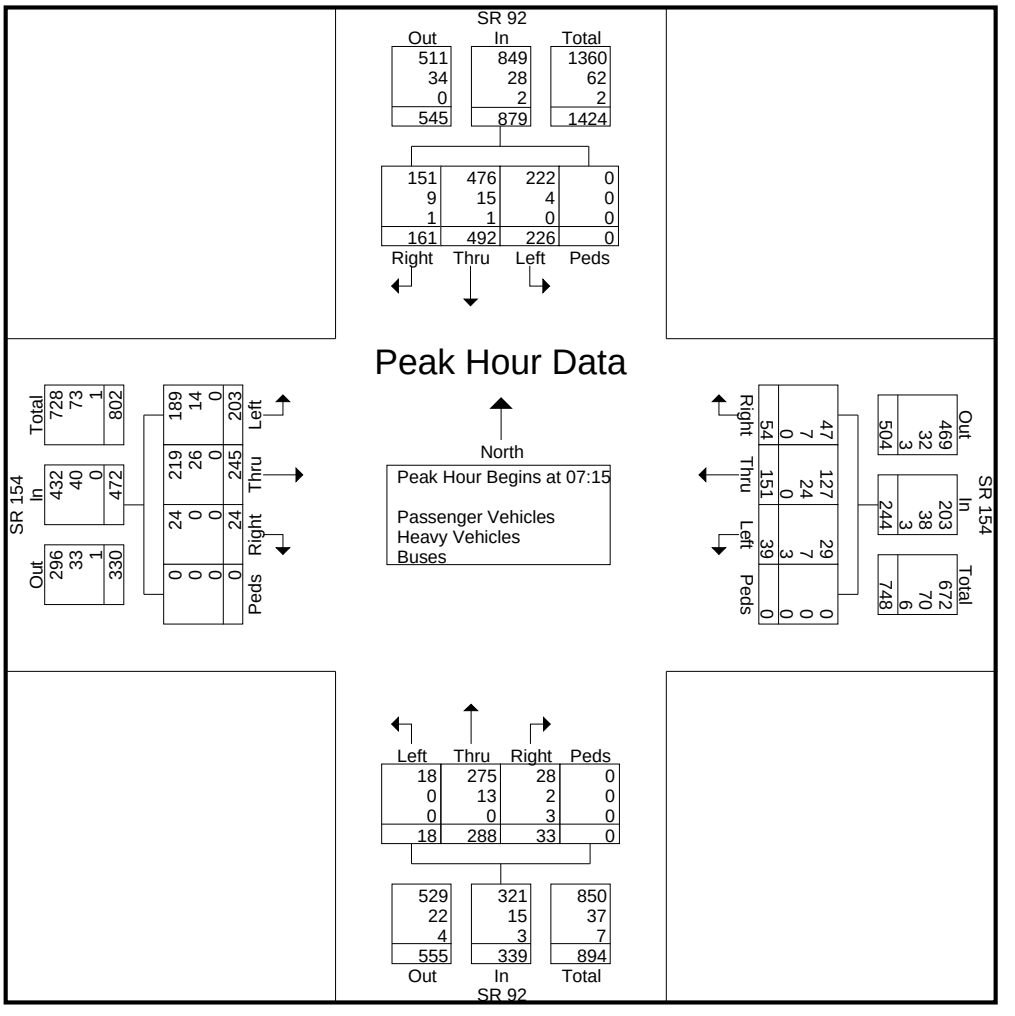
	SR 92 Southbound					SR 154 Westbound					SR 92 Northbound					SR 154 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	**65**	130	**47**	0	242	10	25	13	0	48	**6**	61	7	0	74	52	53	**8**	0	113	477
07:30	52	118	37	0	207	9	**47**	6	0	62	3	76	**9**	0	88	51	66	4	0	121	478
07:45	65	**142**	38	0	**245**	**11**	39	**18**	0	**68**	6	**88**	8	0	**102**	41	50	6	0	97	**512**
08:00	44	102	39	0	185	9	40	17	0	66	3	63	9	0	75	**59**	**76**	6	0	**141**	467
Total Volume	226	492	161	0	879	39	151	54	0	244	18	288	33	0	339	203	245	24	0	472	1934
% App. Total	25.7	56	18.3	0		16	61.9	22.1	0		5.3	85	9.7	0		43	51.9	5.1	0		
PHF	.869	.866	.856	.000	.897	.886	.803	.750	.000	.897	.750	.818	.917	.000	.831	.860	.806	.750	.000	.837	.944
Passenger Vehicles	222	476	151	0	849	29	127	47	0	203	18	275	28	0	321	189	219	24	0	432	1805
% Passenger Vehicles																					
Heavy Vehicles	4	15	9	0	28	7	24	7	0	38	0	13	2	0	15	14	26	0	0	40	121
% Heavy Vehicles	1.8	3.0	5.6	0	3.2	17.9	15.9	13.0	0	15.6	0	4.5	6.1	0	4.4	6.9	10.6	0	0	8.5	6.3
Buses	0	1	1	0	2	3	0	0	0	3	0	0	3	0	3	0	0	0	0	0	8
% Buses	0	0.2	0.6	0	0.2	7.7	0	0	0	1.2	0	0	9.1	0	0.9	0	0	0	0	0	0.4



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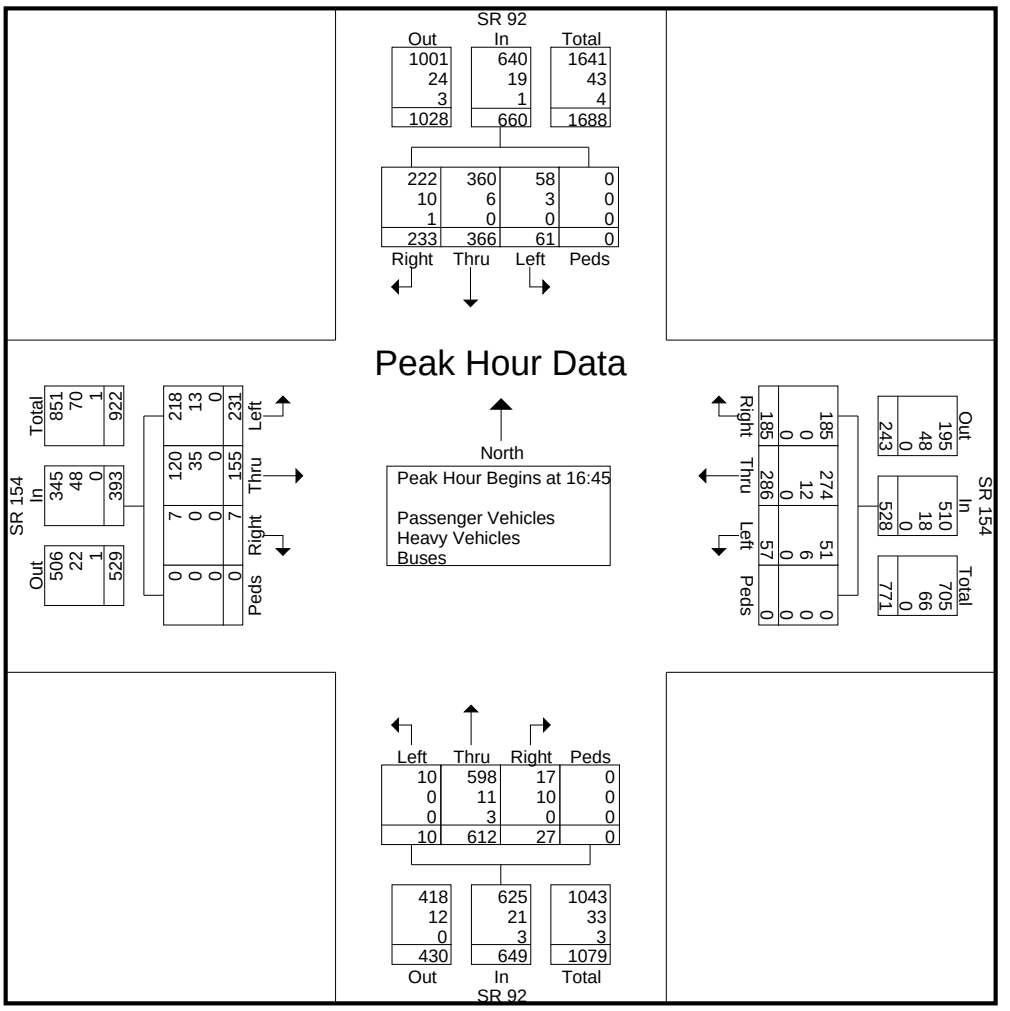
File Name : SR 154 @ SR 92
Site Code :
Start Date : 01/11/2024
Page No : 4

	SR 92 Southbound					SR 154 Westbound					SR 92 Northbound					SR 154 Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	12	**101**	50	0	163	15	67	41	0	123	2	147	7	0	156	**70**	37	**3**	0	**110**	552
17:00	14	96	55	0	165	11	67	39	0	117	**3**	**171**	4	0	**178**	49	39	0	0	88	548
17:15	16	81	63	0	160	12	67	**65**	0	**144**	3	141	**8**	0	152	62	**44**	1	0	107	563
17:30	**19**	88	**65**	0	**172**	**19**	**85**	40	0	144	2	153	8	0	163	50	35	3	0	88	**567**
Total Volume	61	366	233	0	660	57	286	185	0	528	10	612	27	0	649	231	155	7	0	393	2230
% App. Total	9.2	55.5	35.3	0		10.8	54.2	35	0		1.5	94.3	4.2	0		58.8	39.4	1.8	0		
PHF	.803	.906	.896	.000	.959	.750	.841	.712	.000	.917	.833	.895	.844	.000	.912	.825	.881	.583	.000	.893	.983
Passenger Vehicles	58	360	222	0	640	51	274	185	0	510	10	598	17	0	625	218	120	7	0	345	2120
% Passenger Vehicles																					
Heavy Vehicles	3	6	10	0	19	6	12	0	0	18	0	11	10	0	21	13	35	0	0	48	106
% Heavy Vehicles	4.9	1.6	4.3	0	2.9	10.5	4.2	0	0	3.4	0	1.8	37.0	0	3.2	5.6	22.6	0	0	12.2	4.8
Buses	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
% Buses	0	0	0.4	0	0.2	0	0	0	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0.2



SHORT COUNTS
Traffic Data Specialists

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Columbia, SC 29201
We Can't say we're the Best, but you Can!

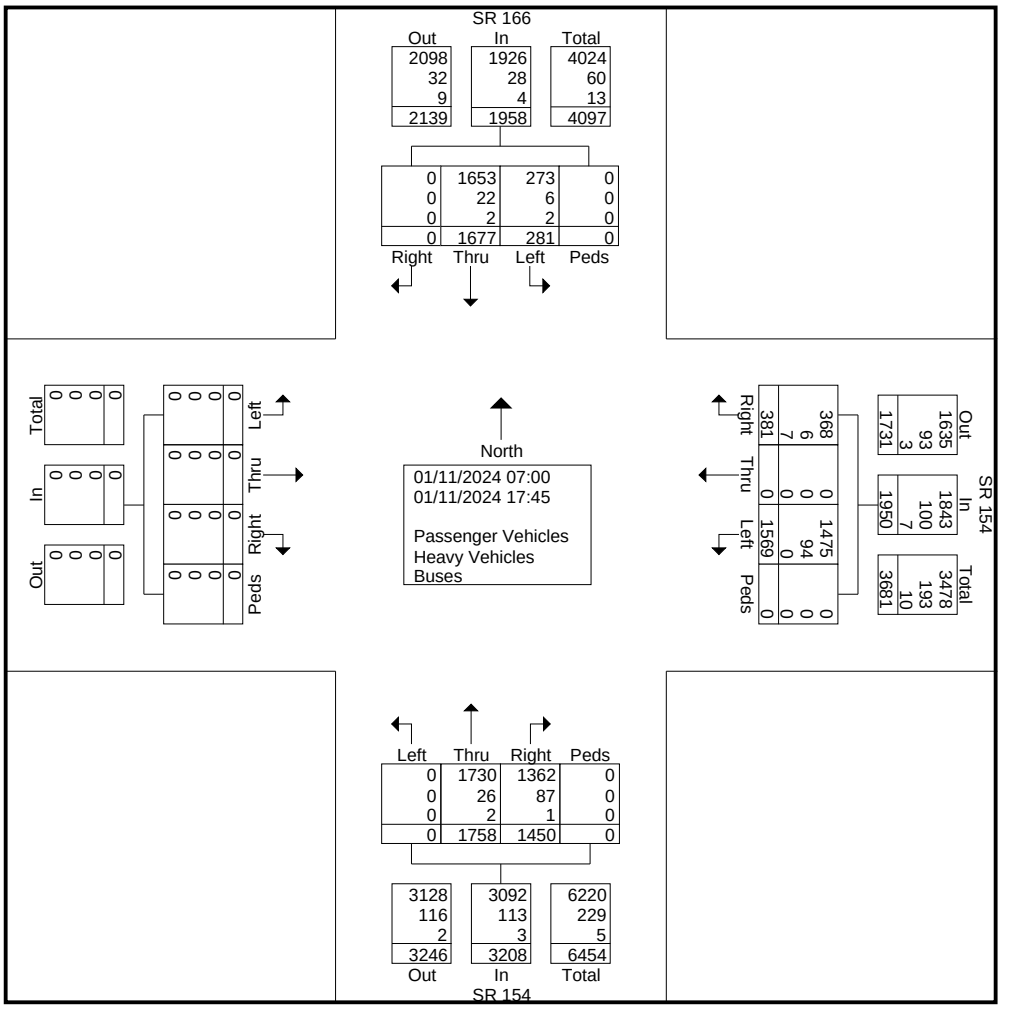
File Name : SR 166 @ SR 154
Site Code :
Start Date : 01/11/2024
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	SR 166 Southbound				SR 154 Westbound				SR 154 Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	15	156	0	0	95	0	11	0	0	48	50	0	0	0	0	0	375
07:15	15	159	0	0	108	0	12	0	0	63	56	0	0	0	0	0	413
07:30	21	145	0	0	127	0	12	0	0	63	77	0	0	0	0	0	445
07:45	23	147	0	0	119	0	21	0	0	67	81	0	0	0	0	0	458
Total	74	607	0	0	449	0	56	0	0	241	264	0	0	0	0	0	1691
08:00	18	113	0	0	87	0	16	0	0	67	74	0	0	0	0	0	375
08:15	18	130	0	0	122	0	29	0	0	78	55	0	0	0	0	0	432
08:30	14	116	0	0	77	0	9	0	0	61	64	0	0	0	0	0	341
08:45	12	113	0	0	64	0	12	0	0	50	51	0	0	0	0	0	302
Total	62	472	0	0	350	0	66	0	0	256	244	0	0	0	0	0	1450
16:00	20	71	0	0	83	0	36	0	0	138	103	0	0	0	0	0	451
16:15	22	63	0	0	98	0	30	0	0	141	129	0	0	0	0	0	483
16:30	18	55	0	0	83	0	36	0	0	152	115	0	0	0	0	0	459
16:45	12	86	0	0	107	0	33	0	0	161	131	0	0	0	0	0	530
Total	72	275	0	0	371	0	135	0	0	592	478	0	0	0	0	0	1923
17:00	14	73	0	0	102	0	24	0	0	165	123	0	0	0	0	0	501
17:15	12	92	0	0	96	0	30	0	0	172	113	0	0	0	0	0	515
17:30	24	69	0	0	119	0	32	0	0	181	112	0	0	0	0	0	537
17:45	23	89	0	0	82	0	38	0	0	151	116	0	0	0	0	0	499
Total	73	323	0	0	399	0	124	0	0	669	464	0	0	0	0	0	2052
Grand Total	281	1677	0	0	1569	0	381	0	0	1758	1450	0	0	0	0	0	7116
Apprch %	14.4	85.6	0	0	80.5	0	19.5	0	0	54.8	45.2	0	0	0	0	0	
Total %	3.9	23.6	0	0	22	0	5.4	0	0	24.7	20.4	0	0	0	0	0	
Passenger Vehicles	273	1653	0	0	1475	0	368	0	0	1730	1362	0	0	0	0	0	6861
% Passenger Vehicles	97.2	98.6	0	0	94	0	96.6	0	0	98.4	93.9	0	0	0	0	0	96.4
Heavy Vehicles	6	22	0	0	94	0	6	0	0	26	87	0	0	0	0	0	241
% Heavy Vehicles	2.1	1.3	0	0	6	0	1.6	0	0	1.5	6	0	0	0	0	0	3.4
Buses	2	2	0	0	0	0	7	0	0	2	1	0	0	0	0	0	14
% Buses	0.7	0.1	0	0	0	0	1.8	0	0	0.1	0.1	0	0	0	0	0	0.2

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

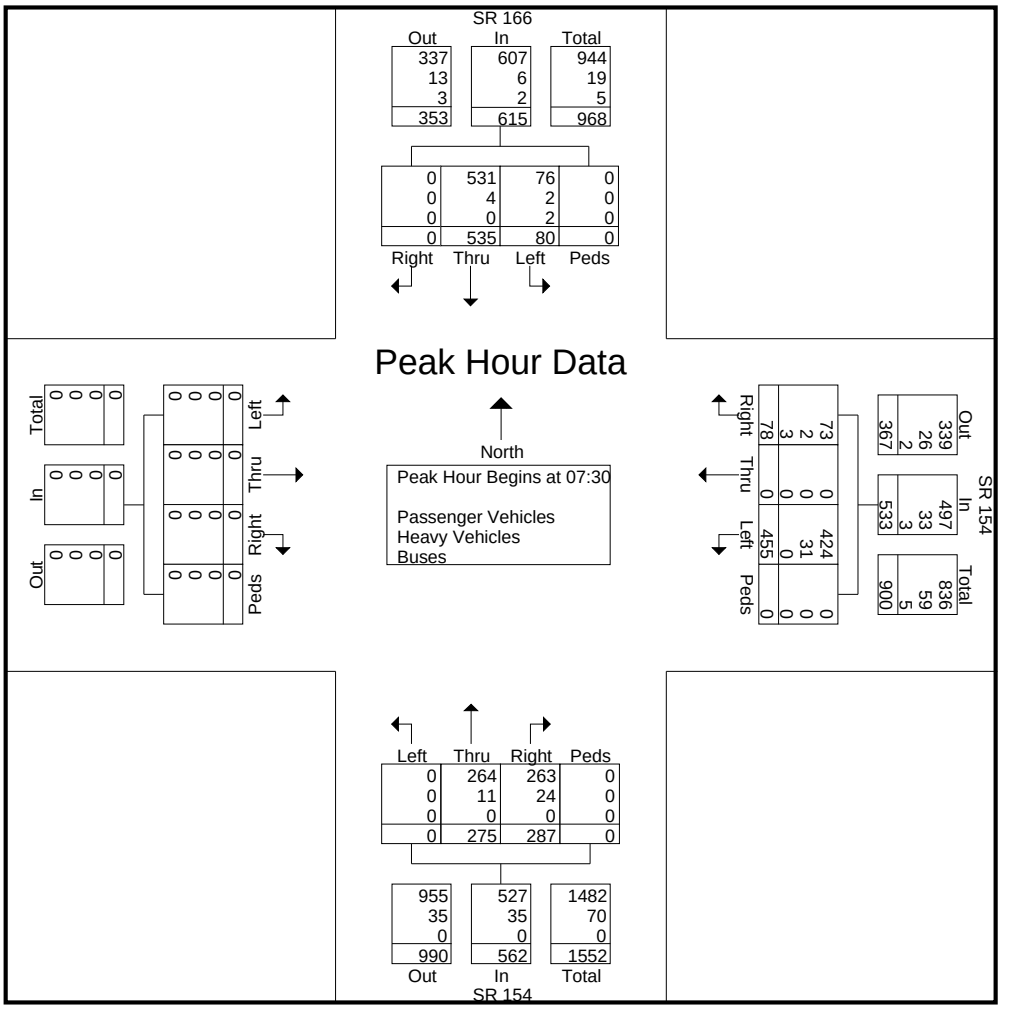
File Name : SR 166 @ SR 154
Site Code :
Start Date : 01/11/2024
Page No : 2



735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 166 @ SR 154
Site Code :
Start Date : 01/11/2024
Page No : 3

	SR 166 Southbound					SR 154 Westbound					SR 154 Northbound					Eastbound					
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 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	21	145	0	0	166	**127**	0	12	0	139	0	63	77	0	140	0	0	0	0	0	445
07:45	**23**	**147**	0	0	**170**	119	0	21	0	140	0	67	**81**	0	**148**	0	0	0	0	0	**458**
08:00	18	113	0	0	131	87	0	16	0	103	0	67	74	0	141	0	0	0	0	0	375
08:15	18	130	0	0	148	122	0	**29**	0	**151**	0	**78**	55	0	133	0	0	0	0	0	432
Total Volume	80	535	0	0	615	455	0	78	0	533	0	275	287	0	562	0	0	0	0	0	1710
% App. Total	13	87	0	0		85.4	0	14.6	0		0	48.9	51.1	0		0	0	0	0		
PHF	.870	.910	.000	.000	.904	.896	.000	.672	.000	.882	.000	.881	.886	.000	.949	.000	.000	.000	.000	.000	.933
Passenger Vehicles	76	531	0	0	607	424	0	73	0	497	0	264	263	0	527	0	0	0	0	0	1631
% Passenger Vehicles																					
Heavy Vehicles	2	4	0	0	6	31	0	2	0	33	0	11	24	0	35	0	0	0	0	0	74
% Heavy Vehicles	2.5	0.7	0	0	1.0	6.8	0	2.6	0	6.2	0	4.0	8.4	0	6.2	0	0	0	0	0	4.3
Buses	2	0	0	0	2	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	5
% Buses	2.5	0	0	0	0.3	0	0	3.8	0	0.6	0	0	0	0	0	0	0	0	0	0	0.3

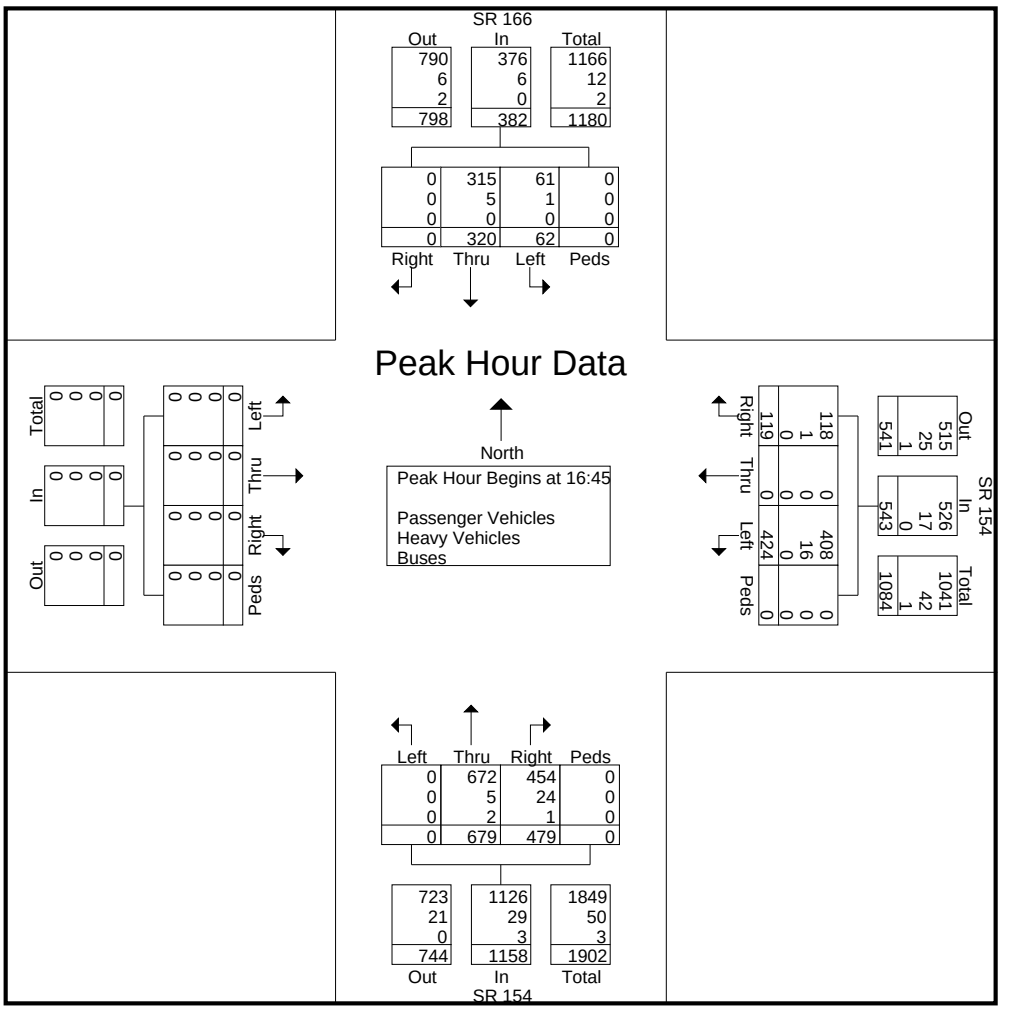


SHORT COUNTS
Traffic Data Specialists

735 Maryland St
Columbia, SC 29201
We Can't say we're the Best, but you Can!

File Name : SR 166 @ SR 154
Site Code :
Start Date : 01/11/2024
Page No : 4

	SR 166 Southbound					SR 154 Westbound					SR 154 Northbound					Eastbound					
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 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	12	86	0	0	98	107	0	**33**	0	140	0	161	**131**	0	292	0	0	0	0	0	530
17:00	14	73	0	0	87	102	0	24	0	126	0	165	123	0	288	0	0	0	0	0	501
17:15	12	**92**	0	0	**104**	96	0	30	0	126	0	172	113	0	285	0	0	0	0	0	515
17:30	**24**	69	0	0	93	**119**	0	32	0	**151**	0	**181**	112	0	**293**	0	0	0	0	0	**537**
Total Volume	62	320	0	0	382	424	0	119	0	543	0	679	479	0	1158	0	0	0	0	0	2083
% App. Total	16.2	83.8	0	0		78.1	0	21.9	0		0	58.6	41.4	0		0	0	0	0		
PHF	.646	.870	.000	.000	.918	.891	.000	.902	.000	.899	.000	.938	.914	.000	.988	.000	.000	.000	.000	.000	.970
Passenger Vehicles	61	315	0	0	376	408	0	118	0	526	0	672	454	0	1126	0	0	0	0	0	2028
% Passenger Vehicles																					
Heavy Vehicles	1	5	0	0	6	16	0	1	0	17	0	5	24	0	29	0	0	0	0	0	52
% Heavy Vehicles	1.6	1.6	0	0	1.6	3.8	0	0.8	0	3.1	0	0.7	5.0	0	2.5	0	0	0	0	0	2.5
Buses	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
% Buses	0	0	0	0	0	0	0	0	0	0	0	0.3	0.2	0	0.3	0	0	0	0	0	0.1



30120.0001 Traffic Counts in City of South Fulton, GA

Study Intersection

Counties

2. SR 154 & SR 92 - traffic signal
3. Ridge Rd & Clark Rd - side street stop
5. Ridge Rd & Bethlehem Rd - side street stop
6. Ridge Rd/Butner Rd & SR 92 - traffic signal
7. South Fulton Pkwy & Cedar Grove Rd - traffic signal
8. Cedar Grove Rd & Bethlehem Rd - side street stop
9. Clark Rd & Bethlehem Rd - side street stop
10. Thompson Rd & SR 92 - traffic signal
11. Hall Rd & SR 92 - traffic signal
12. Jones Rd & SR 92 - side street stop
13. Demooney Rd & SR 92 - side street stop
14. SR 166 & SR 92 - roundabout

THOMAS & HUTTON

This map was created using geothinQ | www.geothinQ.com | Mapping Smart Land Decisions

GRTA Letter of Understanding

LETTER OF UNDERSTANDING

January 8, 2024

Todd Malphrus
Gaskin Banks
2 Williams Street
Greenville, SC 29601

RE: **Cascade Palmetto Highway & Ridge Road (DRI#: 4074)**

Dear Todd Malphrus:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on December 18, 2023 regarding **Cascade Palmetto Highway & Ridge Road** Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet, shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located at the northeast corner of the intersection of SR 154 and Ridge Road in the City of South Fulton.
- The proposed development includes 643 dwelling units, including 491 single-family units and 152 townhomes, on 327 acres of property, including 130 acres of open space.
- The projected build-out is one phase to be completed by 2027.
- The proposed development includes (3) site accesses, 1 on the east side of SR 154 and 2 on Ridge Road.
- The DRI trigger for this development is a rezoning from AG-1 (Agricultural) and R-2A (Single-Family Dwelling) to CUP (Community Unit Plan).
- The vehicular trip generation is estimated to be 5,470 net daily trips based on the *ITE Trip Generation Manual 11th edition.*
- The applicant is applying for approval under GRTA's non-expedited Traffic Impact Study review process.

STUDY NETWORK

1. SR 154 from the north site access to SR 92
2. Ridge Rd from the east site access to Bethlehem Rd
3. Ridge Rd from Bethlehem Rd to SR 92
4. Cedar Grove Rd South from South Fulton Pkwy to Bethlehem Rd
5. SR 92 from Thompson Rd to Hall Rd
6. SR 92 from Hall Rd to Ridge Rd/Butner Rd
7. SR 92 from SR 154 to SR 166
8. Bethlehem Rd from Cedar Grove Rd South to Clark Rd

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- All Study Network intersections shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future "no-build" conditions, and (3) future "build" conditions as specified in the *GRTA DRI Review Procedures*.
- This DRI shall be modeled and reviewed in one phase to be completed by 2027.
- The Level of Service (LOS) standard for all analysis shall be LOS D unless specified otherwise in Section 3.2.2.1. For example, a LOS E standard is allowed if the existing LOS for the intersection or approach is a LOS F.
- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account as required in Section 3.2.2.
- The trip generation calculations in the revised Methodology Meeting Packet shall be used in the Transportation Study. Mixed-use and pass-by reductions are not allowed for this site. Pass-by reductions shall not exceed 15% of a roadway's traffic volume standard established in Appendix 7.2.
- The trip assignment approach in the revised Methodology Meeting Packet shall be utilized for all Study Network intersection movements.
- The applicant shall research TIP, STIP, RTP and GDOT's construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. Programmed transportation projects anticipated to open on or before the Build Out year of the DRI Project shall be modeled as completed in the No-Build and Build conditions unless approved otherwise.
- The City of South Fulton's Sidewalk & Streetscape Ordinance Standards and Alternative Mode Access must be confirmed in the traffic impact study.
- Nearby Developments or DRIs listed in the Methodology Meeting Packet must be considered in the traffic impact study.
- A 2.0% annual traffic Background Growth Rate shall be used for all roadways.
- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA, unless specified otherwise. As specified in Section 2.3, turning movement counts shall be collected while local schools are in session, on a Tuesday, Wednesday or Thursday (unless approved otherwise) and not during holiday periods (weeks of July 4th, Thanksgiving and +/- 5 days of Christmas).
- COVID-19: The transportation analysis shall utilize existing turning movement count data when available during COVID. All counts older than a year shall be grown by the Background Growth Rate unless approved otherwise. If new counts are required, a control count location where existing count data is available shall be used for developing traffic growth extrapolation rates. The traffic engineer shall submit the proposed growth rates to GRTA, GDOT and local government stakeholders for input and GRTA approval before submitting the Transportation Study.
- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Transportation Study shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting

Packet. These inputs may include a Heavy Vehicle modeling percentages, a Heavy Vehicle route map, a pedestrian crosswalk delay adjustment and a bus blockage adjustment factor.

ADDITIONAL REQUIREMENTS

All applicable requirements of the *GRTA DRI Review Procedures* must be met for the Transportation Study to be considered complete. The *GRTA DRI Review Procedures* are located on GRTA's DRI website: https://www.srta.ga.gov/programs-projects/dev-of-regional-impact/ Contact GRTA staff if you have any questions on these requirements.

The Transportation Study shall also include as attachments the native LOS modeling file (i.e., Synchro modeling files) as well as the modeling reports (PDFs) for all Study Network intersections for the Existing, No-Build and Build conditions for all phases. The PDF reports shall be numbered (in page headers) and organized in order according to the Study Network numbering sequence in this Letter of Understanding. The reports shall also be organized in the following sequence: *Existing condition AM, Existing condition PM, No-build condition AM, No-Build condition PM, Build condition AM, Build condition PM*. If improvements are modeled, those PDFs shall be labeled as such and follow the appropriate condition's applicable peak period.

The Transportation Study appendices shall also include all turning movement count data, regardless of if using historic data or newly collected turning movement counts.

When documenting any Queue Length impacts required in Section 3.2.3.6, the TIS Executive Summary shall also note any individual *movements* not meeting the LOS standard where the DRI Project adds trips in the Build condition and exceeds available storage capacity for that movement.

When identifying mitigations in the existing, no-build and build conditions, the mitigations identified in preceding conditions shall not be modeled as complete when conducting the LOS analysis. The same mitigation may still be proposed as mitigation in the subsequent condition but it shall not be included as completed in the default analysis. For example, a turn lane may be identified as a needed improvement in the no-build condition. The turn lane should not be modeled as completed in the build condition. The turn lane should only be modeled as complete in the no-build with improvements condition and the build with improvements condition.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Transportation Study (including LOS appendices, traffic count data and any other required attachments) and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding**.

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with a FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Brittany Williams
Program Manager

Cc:

Donald Shockey, ARC
Reginald James, ARC
Francis Rozier, ARC
Jean Hee P. Barrett, ARC
Reginald McClendon, City of South Fulton
Karen Tominey, City of South Fulton
Philip Shafer, Douglas County
Karla Poshedly, Douglas County
Marissa Jackson, Douglas County
Landon Perry, GDOT District 7
Megan Wilson, GDOT District 7

Julie Doyle, Thomas & Hutton
Ryan Thompson, Thomas & Hutton
Michele Battle, Battle Law
Brittany Williams, SRTA/GRTA

Fact Sheets for Planned and Programmed Improvements

SR 92 @ CR 515/JONES ROAD & @ CR 485/DEMOONEY ROAD

Project ID:	**0017398**	Notice to Proceed Date:	
Project Manager:	Chris Penuel	Construction Percent Complete:	%
Office:	Program Delivery	Current Completion Date:	
County:	Fulton	Work Completion Date:	
Congressional District:	013	Construction Contract Amount:	
State Senate District.:	035	Construction Contractor:	
State House District:	062, 065	**Preconstruction Status Report**	
Project Type:	Safety	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:	11/14/2023	Contact Us	

Project Description:

The proposed project is the construction of two roundabouts along SR 92 / Campbellton Fairburn Road in Fulton County, GA: one at the intersection of Jones Road and the other at the intersection of at Demooney Road. The total length of project is 4040 feet. The construction length at Jones Road is 1842 feet and the construction length at Demooney Road is 1739 feet. Both roundabouts are proposed as multilane hybrid roundabouts. The number of roundabout lanes should be evaluated during design. The roundabout would be expected to reduce or eliminate the angle, head-on, and sideswipe-opposite direction crashes at the two subject intersections which account for 52% of total crashes.

Activity	Program Year	Cost Estimate	Date of Last Estimate
UTL (Utilities)		$84,683.02	10/14/2021
ROW (Right of Way)		$318,000.00	10/14/2021
CST (Construction)		$5,466,879.38	10/14/2021
PE (Preliminary Engineering)	2021	$810,000.00	

Project Documents
Approved Concept Reports
0017398_CR_AUG2021.pdf

Georgia Department of Transportation
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office

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Street lighting is not provided on this stretch of SR 92 nor at the intersections. Parking is not allowed along this section of SR 92 and no other modes of transport are observed along this section of SR 92.

At the intersection of SR 92 and Demooney Road, the existing intersection was analyzed to operate at a level of service of F with a delay over 200 seconds during the PM peak hour in the existing year 2017. The no build condition is expected to operate at a level of service of F with a delay over 500 seconds during the PM peak hour in the design year 2044.

At the intersection of SR 92 and Jones Road, the existing intersection was analyzed to operate at a level of service of F with a delay over 300 seconds during the PM peak hour in the existing year 2017. The no build condition is expected to operate at a level of service of F with a delay over 500 seconds during the PM peak hour in the design year 2044.

Other projects in the area:

- A traffic signal was installed at the intersection of SR 92 and Butner Road/Ridge Road located about 1.42 miles north of the intersection SR 92 and Demooney Road. However, there is a planned GDOT project (PI # 0015593 "SR 92 @ CR 1374/Butner Road") to convert this intersection to a single-lane roundabout, and the ROW authorization is scheduled in 2021.
- A bridge replacement project (PI # 770271 "CR 485/Demooney Road NW of Fairburn @ Deep Creek") on Demooney Road at Deep Creek located about 4,000 feet east of SR 92. This project is included in the GDOT long range program (year 2052).
- A private developer has plans to move forward with a regional developmental project pursuant the approval of the Development Regional Impact (DRI) notice 398 Hampton Oaks (fka PEC Butner Road) by the Georgia Regional Transportation Authority (GRTA). This plan will include the installation of dedicated left-turn lanes on Demooney Road approach towards SR 92 and on SR 92 southbound approach towards Demooney Road. GDOT District 7 has received plans for this development and these plans have been reviewed in coordination with this concept report. The estimate schedule of the project is unknown.
- Fulton County has a project programmed with T-SPLOST (Transportation-related Special-Purpose Local-Option Sales Tax) funds at the intersection of SR 92 and Jones Road. It is has been discussed with the City of South Fulton that this T-SPLOST project will assist in funding this roundabout project.
- Fulton County has plans to pave Jones Road to the west of SR 92. The completion of this project is unknown.

MPO: Atlanta Regional Commission **TIP #:** N/A
Congressional District(s): 13
Federal Oversight: ☐ PoDI ☒ Exempt ☐ State Funded ☐ Other
Projected Traffic: AADT 24-HR Truck: 7.5 %

Roadway	Current Year (2021)	Open Year (2025)	Design Year (2045)
SR 92	21,350	23,125	34,350
Jones Road	2,900	3,125	4,700
Demooney Road	4,450	4,850	7,200

Traffic Projections Performed by: AECOM
Date approved by the GDOT Office of Traffic Operations: 9/3/19

AASHTO Functional Classification (Mainline): *Principal Arterial*
AASHTO Context Classification (Mainline): *Suburban*
AASHTO Project Type (Mainline): *Reconstruction*
Is the project located on a NHS roadway? ☐ No ☒ Yes
Complete Streets - Bicycle, Pedestrian, and/or Transit Standard Warrants:
Warrants met: ☐ None ☐ Bicycle ☒ Pedestrian ☐ Transit

- The study intersections meet the standard pedestrian warrant and conditions 1 and 2. Also, the Renaissance Middle School and the Langston Hughes High School are located less than one mile away from these intersections. The corridor is not serviced by transit nor does it meet the bicycle warrants in the study limits.

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? ☒ No ☐ Yes

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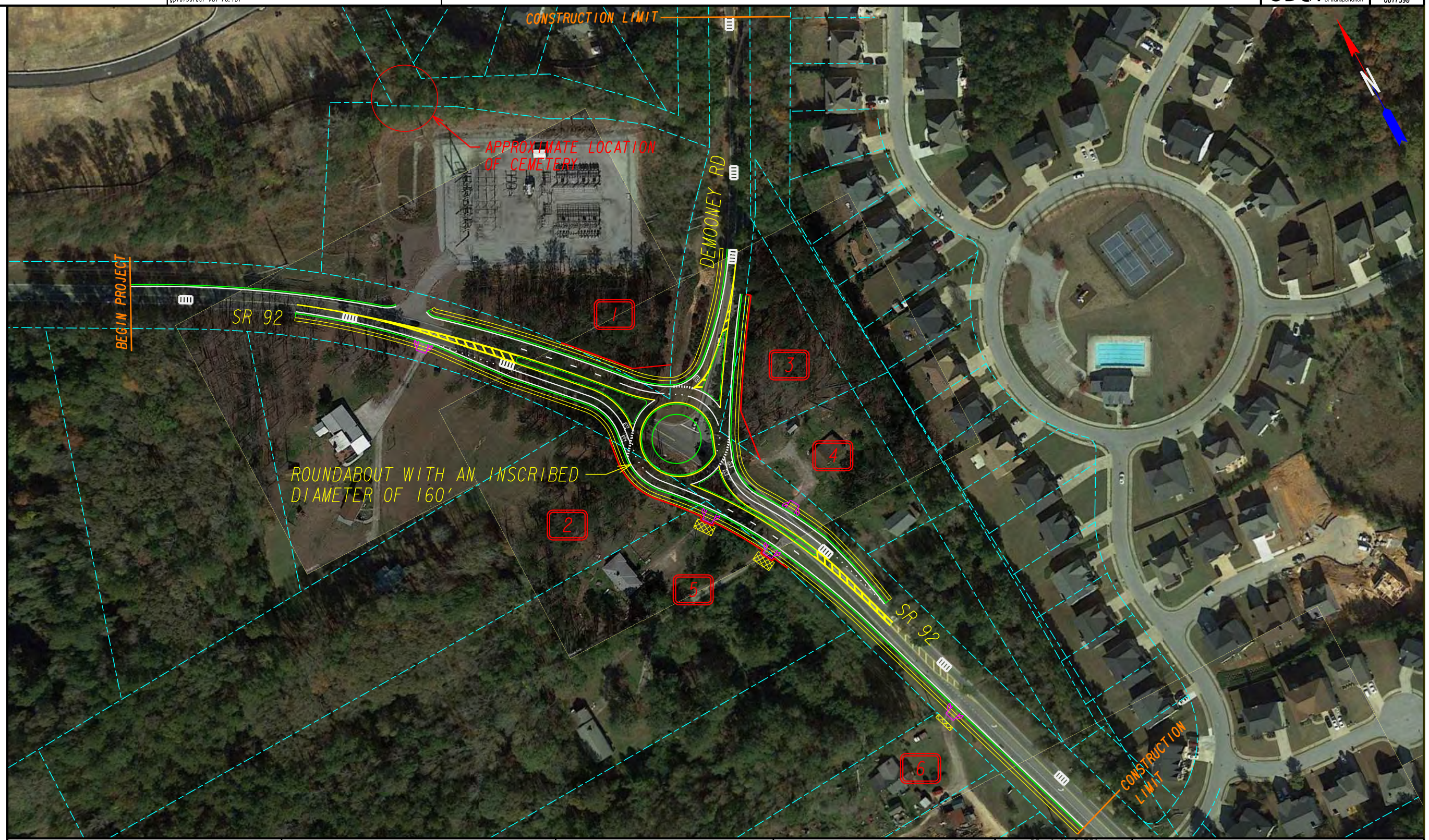

AECOM
ONE MIDTOWN PLAZA
1360 PEACHTREE ST.N.E., SUITE 500
ATLANTA, GEORGIA 30309
TEL: (404) 965-9600 FAX: (404) 965-9605

GDOT Georgia Department of Transportation

SCALE IN FEET
0 70 140 280

REVISION DATES		

CONCEPT PLANS

SR 92 @ DEMOOONEY RD

MULTILANE HYBRID ROUNDABOUT

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		1 OF 2
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/205 GPLN

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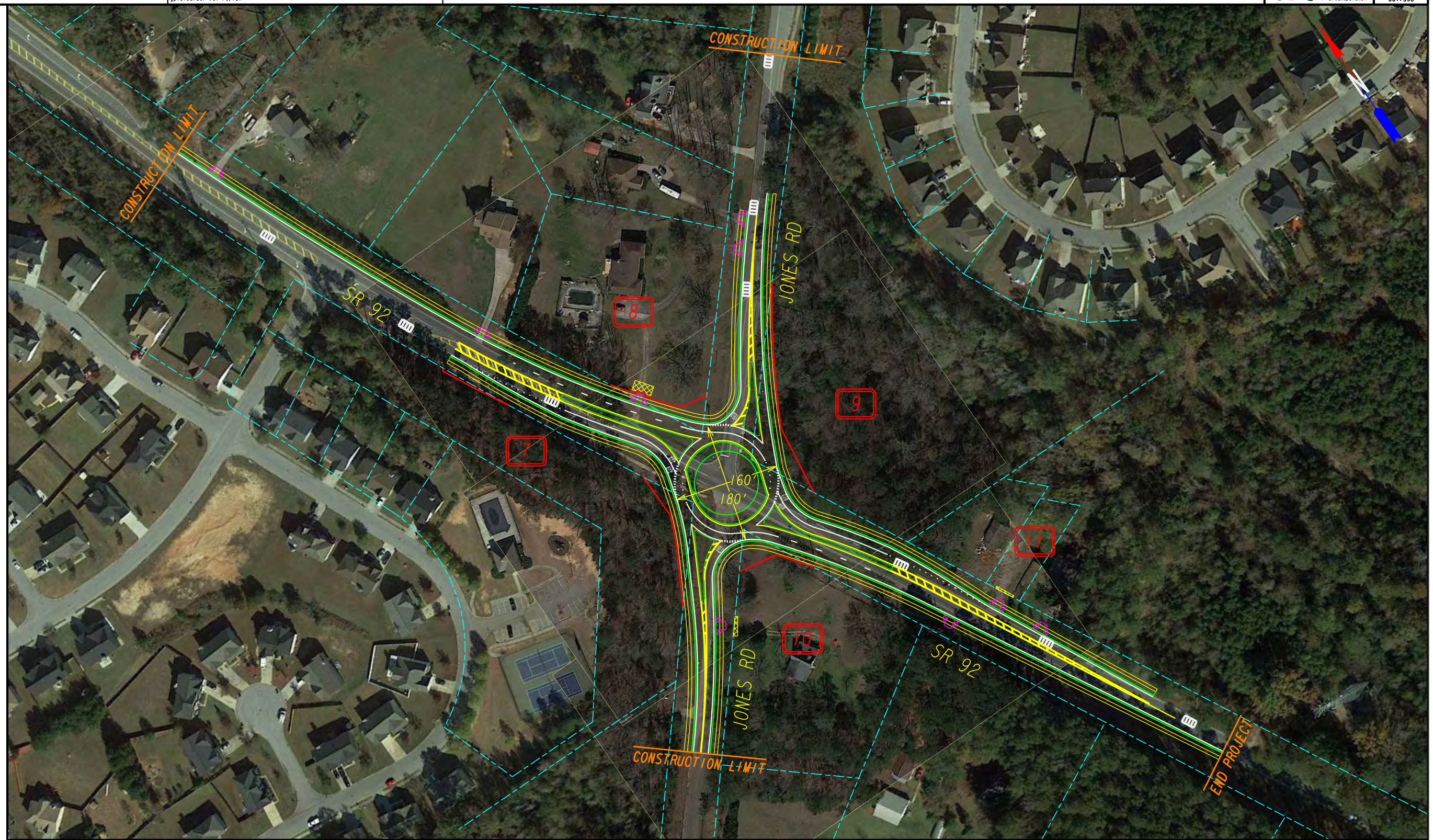
P. I. No.
0017398



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GDOT
Georgia Department of Transportation

SCALE IN FEET
0 70 140 280

REVISION DATES

CONCEPT PLANS

SR 92 @ JONES RD

MULTILANE HYBRID ROUNDABOUT

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		2 OF 2
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/205 GPLN

FS-209

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SOUTH FULTON SCENIC BYWAY MULTI-USE TRAIL - PHASE I FROM COCHRAN MILL PARK TO PHILLIPS ROAD
GDOT Project No.	0009643
Federal ID No.	STP00-0002-00(308)
Status	Programmed
Service Type	Last Mile Connectivity / Sidepaths and Trails
Sponsor	Chattahoochee Hills
Jurisdiction	Fulton County (South)
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane	N/A	**LCI**		**Network Year**	TBD
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	3.1 miles

Detailed Description and Justification

This project consists of the design of a bicycle/pedestrian trail from Cochran Mill Park following the Little Bear Creek corridor approximately 2.2 miles, then shifting southward towards Phillips Road approximately 0.5 miles, ending at an existing gravel path just north of Phillips Road. The typical section is 10' wide concrete with 4' wide graded shoulders. A bridge will be required to cross a tributary to Little Bear Creek approximately 0.25 miles south of the creek. Funding shown for this line item is supplemental to an existing Transportation Enhancement project.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ROW	Local Jurisdiction/Municipality Funds	AUTH	2017	**$25,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$25,000~~
CST	Federal Earmark Funding		2020	**$562,437**	$449,950	$0,000	$0,000	$112,487
				$587,437	**$449,950**	**$0,000**	**$0,000**	**$137,487**

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.

Report Generated: 1/9/2023

FS-011

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	CASCADE-PALMETTO HIGHWAY WIDENING FROM SR 92 (CAMPBELLTON-FAIRBURN ROAD) TO SR 154 (CAMPBELLTON ROAD)
GDOT Project No.	N/A
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	GDOT
Jurisdiction	Fulton County (South)
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2050
Planned Thru Lane	4	**Flex**		**Corridor Length**	4.4 miles

Detailed Description and Justification

This project will widen Cascade-Palmetto Highway to 4 lanes from SR 92 to SR 154.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2041-2050	**$35,000,000**	$0,000	$0,000	$0,000	$35,000,000
				$35,000,000	**$0,000**	**$0,000**	**$0,000**	**$35,000,000**

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

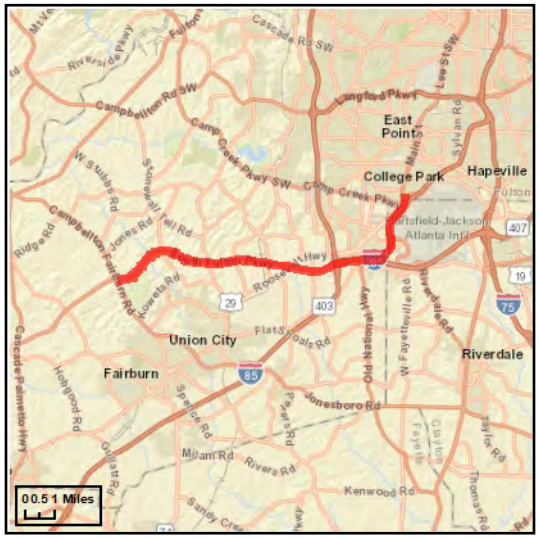
? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 1/9/2023

AR-491A

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SOUTH FULTON PARKWAY CORRIDOR HIGH CAPACITY PREMIUM TRANSIT SERVICE FROM MARTA COLLEGE PARK RAIL STATION TO SR 92
GDOT Project No.	N/A
Federal ID No.	N/A
Status	Long Range
Service Type	Transit / Bus Capital
Sponsor	MARTA
Jurisdiction	Fulton County (South)
Analysis Level	In the Region's Air Quality Conformity Analysis



Existing Thru Lane	N/A	**LCI**		**Network Year**	2050
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	TBD miles

Detailed Description and Justification

This project will provide high capacity premium transit service along the South Fulton Parkway corridor between MARTA's College Park heavy rail station and SR 92.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	New Starts		LR 2041-2050	**$165,000,000**	$57,750,000	$0,000	$0,000	$107,250,000
				$165,000,000	**$57,750,000**	**$0,000**	**$0,000**	**$107,250,000**

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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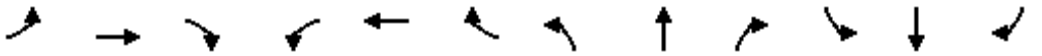
Existing Intersection Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	9	79	181	9	61	141	964	120	63	965	5
Future Volume (vph)	4	9	79	181	9	61	141	964	120	63	965	5
Lane Group Flow (vph)	4	9	81	187	9	63	145	994	124	65	995	5
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8			6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	6	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	28.5	28.5	28.5	15.0	32.5	32.5
Total Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	72.5	72.5	72.5	15.0	87.5	87.5
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	60.4%	60.4%	60.4%	12.5%	72.9%	72.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.02	0.03	0.24	0.78	0.03	0.19	0.55	0.44	0.12	0.17	0.73	0.01
Control Delay	37.8	38.0	10.1	67.9	38.0	8.3	25.0	12.3	2.2	3.0	6.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	37.8	38.0	10.1	67.9	38.0	8.3	25.0	12.3	2.2	3.0	6.3	0.0
Queue Length 50th (ft)	3	6	0	139	6	0	60	194	0	5	86	0
Queue Length 95th (ft)	12	20	41	211	20	31	167	286	26	m9	116	m0
Internal Link Dist (ft)		574			335			1022			938	
Turn Bay Length (ft)	75		175	135		180	270		205	315		290
Base Capacity (vph)	257	427	412	315	427	412	262	2283	1064	417	1370	854
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	47	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.20	0.59	0.02	0.15	0.55	0.44	0.12	0.16	0.75	0.01

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: SR 92 & Thompson Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	9	79	181	9	61	141	964	120	63	965	5
Future Volume (veh/h)	4	9	79	181	9	61	141	964	120	63	965	5
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1530	1900	1841	1870	1900	1870	1885	1856	1856	1870	1870	1307
Adj Flow Rate, veh/h	4	9	0	187	9	0	145	994	0	65	995	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	25	0	4	2	0	2	1	3	3	2	2	40
Cap, veh/h	232	292		271	292		443	2368		433	1411	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.00	0.67	0.67	0.00	0.07	1.00	0.00
Sat Flow, veh/h	1150	1900	1560	1406	1900	1585	570	3526	1572	1781	1870	1108
Grp Volume(v), veh/h	4	9	0	187	9	0	145	994	0	65	995	0
Grp Sat Flow(s),veh/h/ln	1150	1900	1560	1406	1900	1585	570	1763	1572	1781	1870	1108
Q Serve(g_s), s	0.4	0.5	0.0	15.6	0.5	0.0	13.4	15.5	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.5	0.0	16.1	0.5	0.0	13.4	15.5	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	292		271	292		443	2368		433	1411	
V/C Ratio(X)	0.02	0.03		0.69	0.03		0.33	0.42		0.15	0.71	
Avail Cap(c_a), veh/h	314	428		371	428		443	2368		509	1411	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	43.5	43.2	0.0	50.0	43.2	0.0	8.7	9.0	0.0	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.2	0.0	0.0	2.0	0.5	0.0	0.1	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.2	0.0	5.7	0.2	0.0	1.7	5.3	0.0	0.4	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	43.2	0.0	53.3	43.2	0.0	10.6	9.6	0.0	6.0	2.1	0.0
LnGrp LOS	D	D		D	D		B	A		A	A	
Approach Vol, veh/h		13			196			1139			1060	
Approach Delay, s/veh		43.3			52.8			9.7			2.3	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		96.0		24.0	9.9	86.1		24.0				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		82.0		27.0	9.5	67.0		27.0				
Max Q Clear Time (g_c+I1), s		2.0		2.8	3.2	17.5		18.1				
Green Ext Time (p_c), s		24.8		0.0	0.0	21.4		0.3				

Intersection Summary		
HCM 6th Ctrl Delay	10.1	
HCM 6th LOS	B	

Notes

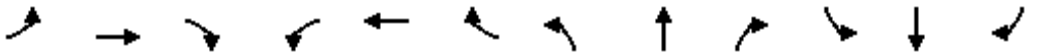
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	30	306	69	111	67	330	539	74	62	658	146
Future Volume (vph)	108	30	306	69	111	67	330	539	74	62	658	146
Lane Group Flow (vph)	0	146	322	0	190	71	347	567	78	65	693	154
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		1	6			2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	30.5	30.5	15.0	28.5	28.5	28.5	28.5	28.5
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	24.0	88.0	88.0	64.0	64.0	64.0
Total Split (%)	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	20.0%	73.3%	73.3%	53.3%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio		0.90	0.58		0.80	0.20	0.73	0.43	0.07	0.14	0.70	0.16
Control Delay		96.1	8.7		70.3	9.6	37.8	10.8	2.8	11.9	21.0	1.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		96.1	8.7		70.3	9.6	37.8	10.8	2.8	11.9	21.0	1.0
Queue Length 50th (ft)		110	0		140	0	195	163	0	19	456	0
Queue Length 95th (ft)		#211	77		219	37	328	322	27	38	534	4
Internal Link Dist (ft)		1001			314			938			742	
Turn Bay Length (ft)			290			230	280			290		350
Base Capacity (vph)		197	607		289	413	488	1315	1194	458	987	935
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.74	0.53		0.66	0.17	0.71	0.43	0.07	0.14	0.70	0.16

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 102 (85%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: SR 92 & Hall Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	30	306	69	111	67	330	539	74	62	658	146
Future Volume (veh/h)	108	30	306	69	111	67	330	539	74	62	658	146
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1885	1900	1870	1826	1900	1900	1856	1900
Adj Flow Rate, veh/h	114	32	0	73	117	0	347	567	0	65	693	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	1	0	2	5	0	0	3	0
Cap, veh/h	187	37		133	168		522	1382		585	1135	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.00	0.20	1.00	0.00	0.61	0.61	0.00
Sat Flow, veh/h	881	247	1610	601	1111	1610	1781	1826	1610	858	1856	1610
Grp Volume(v), veh/h	146	0	0	190	0	0	347	567	0	65	693	0
Grp Sat Flow(s),veh/h/ln	1128	0	1610	1712	0	1610	1781	1826	1610	858	1856	1610
Q Serve(g_s), s	3.2	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	3.8	27.8	0.0
Cycle Q Clear(g_c), s	15.8	0.0	0.0	12.6	0.0	0.0	9.3	0.0	0.0	3.8	27.8	0.0
Prop In Lane	0.78		1.00	0.38		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	224	0		301	0		522	1382		585	1135	
V/C Ratio(X)	0.65	0.00		0.63	0.00		0.66	0.41		0.11	0.61	
Avail Cap(c_a), veh/h	321	0		416	0		620	1382		585	1135	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.91	0.91	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.3	0.0	0.0	48.5	0.0	0.0	10.7	0.0	0.0	9.8	14.4	0.0
Incr Delay (d2), s/veh	3.2	0.0	0.0	2.2	0.0	0.0	1.9	0.8	0.0	0.4	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	0.0	5.6	0.0	0.0	2.7	0.3	0.0	0.7	11.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	0.0	0.0	50.7	0.0	0.0	12.6	0.8	0.0	10.2	16.9	0.0
LnGrp LOS	D	A		D	A		B	A		B	B	
Approach Vol, veh/h		146			190			914			758	
Approach Delay, s/veh		53.5			50.7			5.3			16.3	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	17.4	78.9		23.7		96.3		23.7				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	18.5	58.5		26.5		82.5		26.5				
Max Q Clear Time (g_c+I1), s	11.3	29.8		17.8		2.0		14.6				
Green Ext Time (p_c), s	0.6	10.3		0.4		8.6		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		17.2	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	11.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	3	0	52	14	17	10	599	79	61	874	44
Future Vol, veh/h	1	3	0	52	14	17	10	599	79	61	874	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	4	0	0	3	0
Mvmt Flow	1	3	0	53	14	17	10	611	81	62	892	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1726	1751	915	1712	1733	652	937	0	0	692	0	0
Stage 1	1039	1039	-	672	672	-	-	-	-	-	-	-
Stage 2	687	712	-	1040	1061	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	71	87	333	72	89	471	739	-	-	912	-	-
Stage 1	281	310	-	449	458	-	-	-	-	-	-	-
Stage 2	440	439	-	281	303	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	51	73	333	61	75	471	739	-	-	912	-	-
Mov Cap-2 Maneuver	51	73	-	61	75	-	-	-	-	-	-	-
Stage 1	275	266	-	439	448	-	-	-	-	-	-	-
Stage 2	401	429	-	238	260	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.1	228	0.1	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	739	-	-	66	77	912	-	-
HCM Lane V/C Ratio	0.014	-	-	0.062	1.1	0.068	-	-
HCM Control Delay (s)	9.9	0	-	63.1	228	9.2	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	6.1	0.2	-	-

Intersection	
Int Delay, s/veh	33.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	236	14	349	243	15	628
Future Vol, veh/h	236	14	349	243	15	628
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	2	0	4
Mvmt Flow	251	15	371	259	16	668

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1201	501	0	0	630	0
Stage 1	501	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 206	574	-	-	962	-
Stage 1	613	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 201	574	-	-	962	-
Mov Cap-2 Maneuver	~ 201	-	-	-	-	-
Stage 1	613	-	-	-	-	-
Stage 2	483	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	200.3	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	209	962	-
HCM Lane V/C Ratio	-	-	1.273	0.017	-
HCM Control Delay (s)	-	-	200.3	8.8	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	14.2	0.1	-

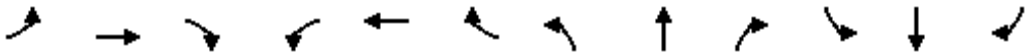
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	19	53	43	57	44	296	27	54	502
Future Volume (vph)	19	53	43	57	44	296	27	54	502
Lane Group Flow (vph)	20	98	46	102	47	318	29	58	569
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Perm	NA
Protected Phases		4		8		6			2
Permitted Phases	4		8		6		6	2	
Detector Phase	4	4	8	8	6	6	6	2	2
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	30.5	30.5	28.5	28.5	28.5	36.5	36.5
Total Split (s)	37.0	37.0	37.0	37.0	83.0	83.0	83.0	83.0	83.0
Total Split (%)	30.8%	30.8%	30.8%	30.8%	69.2%	69.2%	69.2%	69.2%	69.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio	0.19	0.54	0.43	0.56	0.07	0.21	0.02	0.07	0.39
Control Delay	53.3	47.2	63.1	49.7	2.4	2.5	0.7	0.8	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	47.2	63.1	49.7	2.4	2.5	0.7	0.8	2.3
Queue Length 50th (ft)	15	52	34	56	5	37	0	2	50
Queue Length 95th (ft)	39	104	71	111	m12	57	m3	m3	22
Internal Link Dist (ft)		1123		799		3705			2383
Turn Bay Length (ft)	195				310		200	305	
Base Capacity (vph)	309	483	319	488	657	1485	1330	885	1476
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.20	0.14	0.21	0.07	0.21	0.02	0.07	0.39

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 44 (37%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: SR 92 & Ridge Rd/Butner Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	53	38	43	57	38	44	296	27	54	502	27
Future Volume (veh/h)	19	53	38	43	57	38	44	296	27	54	502	27
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1900	1900	1870	1826	1900	1900	1826	1900
Adj Flow Rate, veh/h	20	57	41	46	61	41	47	318	0	58	540	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0	0	0	0	2	5	0	0	5	0
Cap, veh/h	131	110	79	133	115	77	680	1460		877	1460	
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.80	0.80	0.00	0.80	0.80	0.00
Sat Flow, veh/h	1313	1012	728	1318	1060	712	866	1826	1610	1078	1826	0
Grp Volume(v), veh/h	20	0	98	46	0	102	47	318	0	58	540	0
Grp Sat Flow(s),veh/h/ln	1313	0	1739	1318	0	1772	866	1826	1610	1078	1826	0
Q Serve(g_s), s	1.8	0.0	6.4	4.1	0.0	6.5	2.0	5.1	0.0	1.7	10.1	0.0
Cycle Q Clear(g_c), s	8.3	0.0	6.4	10.5	0.0	6.5	12.0	5.1	0.0	6.7	10.1	0.0
Prop In Lane	1.00		0.42	1.00		0.40	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	131	0	189	133	0	192	680	1460		877	1460	
V/C Ratio(X)	0.15	0.00	0.52	0.35	0.00	0.53	0.07	0.22		0.07	0.37	
Avail Cap(c_a), veh/h	333	0	457	336	0	465	680	1460		877	1460	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.5	0.0	50.5	55.5	0.0	50.6	5.1	2.9	0.0	3.7	3.4	0.0
Incr Delay (d2), s/veh	0.5	0.0	2.2	1.5	0.0	2.3	0.2	0.3	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.8	1.4	0.0	3.0	0.3	1.3	0.0	0.3	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	0.0	52.7	57.0	0.0	52.9	5.3	3.3	0.0	3.9	4.1	0.0
LnGrp LOS	E	A	D	E	A	D	A	A		A	A	
Approach Vol, veh/h		118			148			365			598	
Approach Delay, s/veh		53.1			54.2			3.5			4.1	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		101.5		18.5		101.5		18.5				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		77.5		31.5		77.5		31.5				
Max Q Clear Time (g_c+I1), s		12.1		10.3		14.0		12.5				
Green Ext Time (p_c), s		8.7		0.5		4.6		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									

Notes

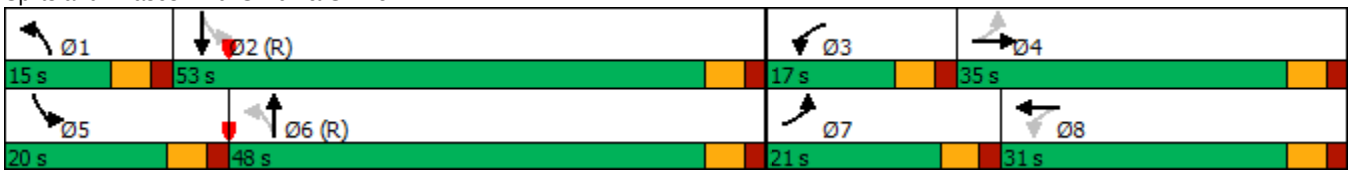
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	203	245	39	151	18	288	226	492
Future Volume (vph)	203	245	39	151	18	288	226	492
Lane Group Flow (vph)	216	287	41	218	19	341	240	694
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	5.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	15.0	28.5	15.0	28.5
Total Split (s)	21.0	35.0	17.0	31.0	15.0	48.0	20.0	53.0
Total Split (%)	17.5%	29.2%	14.2%	25.8%	12.5%	40.0%	16.7%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.66	0.68	0.18	0.79	0.07	0.46	0.46	0.74
Control Delay	39.5	49.2	27.3	64.2	10.3	20.1	17.0	30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	49.2	27.3	64.2	10.3	20.1	17.0	30.1
Queue Length 50th (ft)	124	201	21	153	2	130	90	362
Queue Length 95th (ft)	180	294	44	232	12	257	152	#747
Internal Link Dist (ft)		3937		1310		3134		1962
Turn Bay Length (ft)	245		205		195		190	
Base Capacity (vph)	331	435	281	347	313	743	539	939
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.66	0.15	0.63	0.06	0.46	0.45	0.74

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 20 (17%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	245	24	39	151	54	18	288	33	226	492	161
Future Volume (veh/h)	203	245	24	39	151	54	18	288	33	226	492	161
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1737	1900	1633	1663	1707	1900	1826	1811	1870	1856	1811
Adj Flow Rate, veh/h	216	261	26	41	161	57	19	306	0	240	523	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	11	0	18	16	13	0	5	6	2	3	6
Cap, veh/h	288	379	38	196	183	65	394	829		585	968	
Arrive On Green	0.12	0.24	0.24	0.03	0.16	0.16	0.02	0.45	0.00	0.09	0.52	0.00
Sat Flow, veh/h	1711	1554	155	1555	1173	415	1810	1826	0	1781	1856	0
Grp Volume(v), veh/h	216	0	287	41	0	218	19	306	0	240	523	0
Grp Sat Flow(s),veh/h/ln	1711	0	1709	1555	0	1588	1810	1826	0	1781	1856	0
Q Serve(g_s), s	12.3	0.0	18.3	2.6	0.0	16.1	0.7	13.2	0.0	8.3	22.5	0.0
Cycle Q Clear(g_c), s	12.3	0.0	18.3	2.6	0.0	16.1	0.7	13.2	0.0	8.3	22.5	0.0
Prop In Lane	1.00		0.09	1.00		0.26	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	288	0	417	196	0	247	394	829		585	968	
V/C Ratio(X)	0.75	0.00	0.69	0.21	0.00	0.88	0.05	0.37		0.41	0.54	
Avail Cap(c_a), veh/h	305	0	420	296	0	337	502	829		644	968	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.1	0.0	41.2	41.0	0.0	49.6	17.7	21.5	0.0	14.8	19.1	0.0
Incr Delay (d2), s/veh	9.4	0.0	4.6	0.5	0.0	18.0	0.1	1.3	0.0	0.5	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	7.8	1.0	0.0	7.3	0.3	5.6	0.0	3.1	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.4	0.0	45.8	41.5	0.0	67.6	17.7	22.8	0.0	15.2	21.3	0.0
LnGrp LOS	D	A	D	D	A	E	B	C		B	C	
Approach Vol, veh/h		503			259			325			763	
Approach Delay, s/veh		45.7			63.5			22.5			19.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	68.1	9.2	34.8	16.0	60.0	19.8	24.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	47.5	11.5	29.5	14.5	42.5	15.5	25.5
Max Q Clear Time (g_c+I1), s	2.7	24.5	4.6	20.3	10.3	15.2	14.3	18.1
Green Ext Time (p_c), s	0.0	5.8	0.0	0.9	0.3	3.2	0.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	1	2
Conflicting Circle Lanes	1	1	2
Adj Approach Flow, veh/h	573	605	661
Demand Flow Rate, veh/h	610	642	670
Vehicles Circulating, veh/h	308	89	523
Vehicles Exiting, veh/h	89	1104	395
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.4	2.5	8.7
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left	Right
Designated Moves	L	LTR	T	R	LT	TR
Assumed Moves	L	LTR	T	R	LT	TR
RT Channelized				Free		
Lane Util	0.530	0.470	1.000		0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609		2.667	2.535
Critical Headway, s	4.544	4.544	4.976	334	4.645	4.328
Entry Flow, veh/h	323	287	308	2052	315	355
Cap Entry Lane, veh/h	1073	1073	1260	0.926	834	910
Entry HV Adj Factor	0.940	0.938	0.962	309	0.987	0.987
Flow Entry, veh/h	304	269	296	1900	311	350
Cap Entry, veh/h	1009	1007	1212	0.163	823	899
V/C Ratio	0.301	0.267	0.244	0.0	0.378	0.390
Control Delay, s/veh	6.6	6.2	5.2	A	8.9	8.5
LOS	A	A	A	1	A	A
95th %tile Queue, veh	1	1	1		2	2

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	4	37	10	5	37
Future Vol, veh/h	7	4	37	10	5	37
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	8	10	0	0
Mvmt Flow	9	5	46	12	6	46

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	110	52	0	0	58	0
Stage 1	52	-	-	-	-	-
Stage 2	58	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	892	1021	-	-	1559	-
Stage 1	976	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	888	1021	-	-	1559	-
Mov Cap-2 Maneuver	888	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	932	1559	-
HCM Lane V/C Ratio	-	-	0.015	0.004	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	13	28	32	8	46
Future Vol, veh/h	30	13	28	32	8	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	23	0	0	0	2
Mvmt Flow	39	17	36	42	10	60

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	56	0	162	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	114	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1562	-	834	1021
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	916	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1562	-	814	1021
Mov Cap-2 Maneuver	-	-	-	-	814	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	894	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	984	-	-	1562	-
HCM Lane V/C Ratio	0.071	-	-	0.023	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	7	7	35	57	1
Future Vol, veh/h	3	7	7	35	57	1
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	33	0	0	3	2	0
Mvmt Flow	4	9	9	46	75	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	140	76	76	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.73	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	785	991	1536	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	780	991	1536	-	-	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	886	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	917	-	-
HCM Lane V/C Ratio	0.006	-	0.014	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	147	103	43	62	11
Future Vol, veh/h	5	147	103	43	62	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	2	4	2	0	0
Mvmt Flow	6	173	121	51	73	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	172	0	-	0	332	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	185	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1417	-	-	-	667	905
Stage 1	-	-	-	-	885	-
Stage 2	-	-	-	-	852	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1417	-	-	-	664	905
Mov Cap-2 Maneuver	-	-	-	-	664	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	852	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.9
HCM LOS			B

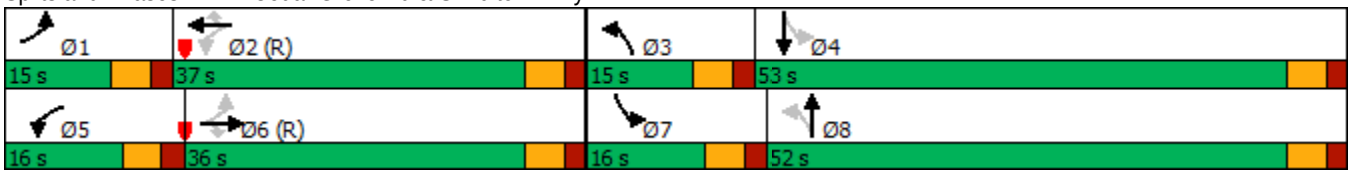
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1417	-	-	-	692
HCM Lane V/C Ratio	0.004	-	-	-	0.124
HCM Control Delay (s)	7.6	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

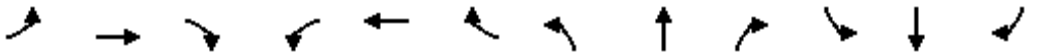
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	27	639	33	127	297	84	14	88	159	149
Future Volume (vph)	27	639	33	127	297	84	14	88	159	149
Lane Group Flow (vph)	31	734	38	146	341	97	16	402	183	192
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	1	6		5	2		3	8	7	4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	3	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	6.0	5.0	6.0
Minimum Split (s)	15.0	31.5	31.5	15.0	28.5	28.5	15.0	45.5	15.0	41.5
Total Split (s)	15.0	36.0	36.0	16.0	37.0	37.0	15.0	52.0	16.0	53.0
Total Split (%)	12.5%	30.0%	30.0%	13.3%	30.8%	30.8%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.06	0.49	0.05	0.40	0.20	0.11	0.04	0.85	0.84	0.33
Control Delay	15.8	28.9	0.1	18.2	20.4	2.7	22.2	44.1	58.1	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.8	28.9	0.1	18.2	20.4	2.7	22.2	44.1	58.1	32.2
Queue Length 50th (ft)	10	212	0	52	81	0	8	198	102	103
Queue Length 95th (ft)	30	323	0	103	133	20	19	268	#164	161
Internal Link Dist (ft)		2109			2773			901		3276
Turn Bay Length (ft)	295		150	320		160	65		120	
Base Capacity (vph)	545	1499	755	375	1732	852	405	733	219	737
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.49	0.05	0.39	0.20	0.11	0.04	0.55	0.84	0.26

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Cedar Grove Rd & S. Fulton Pkwy





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	639	33	127	297	84	14	88	262	159	149	18
Future Volume (veh/h)	27	639	33	127	297	84	14	88	262	159	149	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1900	1885	1856	1885	1900	1856	1885	1885	1885	1900
Adj Flow Rate, veh/h	31	734	0	146	341	0	16	101	301	183	171	21
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	2	0	1	3	1	0	3	1	1	1	0
Cap, veh/h	475	1398		347	1518		413	112	333	251	563	69
Arrive On Green	0.03	0.39	0.00	0.06	0.43	0.00	0.02	0.27	0.27	0.09	0.34	0.34
Sat Flow, veh/h	1711	3554	1610	1795	3526	1598	1810	411	1224	1795	1647	202
Grp Volume(v), veh/h	31	734	0	146	341	0	16	0	402	183	0	192
Grp Sat Flow(s),veh/h/ln	1711	1777	1610	1795	1763	1598	1810	0	1635	1795	0	1849
Q Serve(g_s), s	1.3	19.0	0.0	5.7	7.3	0.0	0.8	0.0	28.5	8.5	0.0	9.2
Cycle Q Clear(g_c), s	1.3	19.0	0.0	5.7	7.3	0.0	0.8	0.0	28.5	8.5	0.0	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		0.11
Lane Grp Cap(c), veh/h	475	1398		347	1518		413	0	445	251	0	632
V/C Ratio(X)	0.07	0.53		0.42	0.22		0.04	0.00	0.90	0.73	0.00	0.30
Avail Cap(c_a), veh/h	564	1398		389	1518		525	0	634	251	0	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	27.8	0.0	20.7	21.5	0.0	30.6	0.0	42.2	30.6	0.0	29.0
Incr Delay (d2), s/veh	0.1	1.4	0.0	0.8	0.3	0.0	0.0	0.0	12.6	10.2	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	0.5	7.8	0.0	2.3	2.9	0.0	0.3	0.0	12.6	4.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	29.3	0.0	21.5	21.9	0.0	30.6	0.0	54.8	40.9	0.0	29.3
LnGrp LOS	C	C		C	C		C	A	D	D	A	C
Approach Vol, veh/h		765			487			418			375	
Approach Delay, s/veh		28.9			21.8			53.9			34.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	57.2	7.6	46.5	13.2	52.7	16.0	38.1
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	31.5	9.5	47.5	10.5	30.5	10.5	46.5
Max Q Clear Time (g_c+I1), s	3.3	9.3	2.8	11.2	7.7	21.0	10.5	30.5
Green Ext Time (p_c), s	0.0	3.4	0.0	1.0	0.1	4.8	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	4	84	702	999
Demand Flow Rate, veh/h	4	84	726	1026
Vehicles Circulating, veh/h	1034	646	66	77
Vehicles Exiting, veh/h	69	146	972	653
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	5.4	5.3	6.7
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	4	84	341	385	482	544
Cap Entry Lane, veh/h	590	820	1270	1343	1258	1330
Entry HV Adj Factor	1.000	1.000	0.967	0.966	0.974	0.974
Flow Entry, veh/h	4	84	330	372	470	530
Cap Entry, veh/h	590	820	1228	1297	1225	1295
V/C Ratio	0.007	0.102	0.268	0.287	0.383	0.409
Control Delay, s/veh	6.2	5.4	5.3	5.3	6.7	6.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	2	2

Intersection	
Intersection Delay, s/veh	5.8
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	266	630	684
Demand Flow Rate, veh/h	266	654	711
Vehicles Circulating, veh/h	390	16	251
Vehicles Exiting, veh/h	280	946	405
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.1	4.8	6.6
Approach LOS	A	A	A

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.469	0.531	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	266	307	347	334	377
Cap Entry Lane, veh/h	1019	1330	1401	1072	1147
Entry HV Adj Factor	1.000	0.965	0.963	0.963	0.962
Flow Entry, veh/h	266	296	334	322	363
Cap Entry, veh/h	1019	1284	1349	1032	1104
V/C Ratio	0.261	0.231	0.248	0.312	0.329
Control Delay, s/veh	6.1	4.8	4.8	6.6	6.5
LOS	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	1

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	118	148	394	627
Demand Flow Rate, veh/h	119	148	411	654
Vehicles Circulating, veh/h	671	402	136	155
Vehicles Exiting, veh/h	109	116	654	395
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.2	5.5	6.0	9.1
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Bypass	Left	Bypass
Designated Moves	LTR	LTR	LT	R	LT	R
Assumed Moves	LTR	LTR	LT	R	LT	R
RT Channelized				Yield		Yield
Lane Util	1.000	1.000	1.000		1.000	
Follow-Up Headway, s	2.609	2.609	2.609		2.609	
Critical Headway, s	4.976	4.976	4.976	29	4.976	29
Entry Flow, veh/h	119	148	382	1226	625	1235
Cap Entry Lane, veh/h	696	916	1201	1.000	1178	1.000
Entry HV Adj Factor	0.990	1.000	0.956	29	0.957	29
Flow Entry, veh/h	118	148	365	1226	598	1235
Cap Entry, veh/h	689	916	1148	0.024	1127	0.023
V/C Ratio	0.171	0.162	0.318	3.1	0.531	3.1
Control Delay, s/veh	7.2	5.5	6.2	A	9.4	A
LOS	A	A	A	0	A	0
95th %tile Queue, veh	1	1	1		3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	10	87	288	4	87	59	1114	103	130	822
Future Volume (vph)	7	10	87	288	4	87	59	1114	103	130	822
Lane Group Flow (vph)	8	11	95	313	4	95	64	1211	112	141	893
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases		4			8			6		5	2
Permitted Phases	4		4	8		8	6		6	2	
Detector Phase	4	4	4	8	8	8	6	6	6	5	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	5.0	15.0
Minimum Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	28.5	28.5	28.5	15.0	32.5
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	63.0	63.0	63.0	16.0	79.0
Total Split (%)	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%	52.5%	52.5%	52.5%	13.3%	65.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lag	Lag	Lag	Lead	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	None	C-Min
v/c Ratio	0.02	0.02	0.21	0.87	0.01	0.20	0.31	0.65	0.12	0.51	0.74
Control Delay	30.7	30.7	7.3	66.0	30.5	7.2	23.4	23.1	5.1	19.6	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	30.7	7.3	66.0	30.5	7.2	23.4	23.1	5.1	19.6	14.4
Queue Length 50th (ft)	5	6	0	229	2	0	27	347	7	29	216
Queue Length 95th (ft)	17	21	40	#334	11	40	70	466	39	108	457
Internal Link Dist (ft)		574			335			1022			938
Turn Bay Length (ft)	75		175	135		180	270		205	315	
Base Capacity (vph)	424	562	513	421	449	544	208	1875	898	298	1208
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	2
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.19	0.74	0.01	0.17	0.31	0.65	0.12	0.47	0.74

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 1 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 92 & Thompson Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	10	87	288	4	87	59	1114	103	130	822	0
Future Volume (veh/h)	7	10	87	288	4	87	59	1114	103	130	822	0
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1796	1900	1530	1900	1752	1856	1885	1900	1856	1900
Adj Flow Rate, veh/h	8	11	0	313	4	0	64	1211	0	141	893	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	7	0	25	0	10	3	1	0	3	0
Cap, veh/h	402	457		397	368		394	2020		312	1239	
Arrive On Green	0.24	0.24	0.00	0.24	0.24	0.00	0.57	0.57	0.00	0.10	1.00	0.00
Sat Flow, veh/h	1435	1900	1522	1426	1530	1610	583	3526	1598	1810	1856	1610
Grp Volume(v), veh/h	8	11	0	313	4	0	64	1211	0	141	893	0
Grp Sat Flow(s),veh/h/ln	1435	1900	1522	1426	1530	1610	583	1763	1598	1810	1856	1610
Q Serve(g_s), s	0.5	0.5	0.0	25.8	0.2	0.0	6.3	26.8	0.0	3.8	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.5	0.0	26.3	0.2	0.0	6.3	26.8	0.0	3.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	457		397	368		394	2020		312	1239	
V/C Ratio(X)	0.02	0.02		0.79	0.01		0.16	0.60		0.45	0.72	
Avail Cap(c_a), veh/h	482	562		475	452		394	2020		382	1239	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.75	0.75	0.00
Uniform Delay (d), s/veh	35.0	34.8	0.0	44.9	34.7	0.0	12.3	16.7	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.3	0.0	0.0	0.9	1.3	0.0	0.8	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	9.9	0.1	0.0	0.9	10.2	0.0	1.3	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	34.8	0.0	52.2	34.7	0.0	13.2	18.0	0.0	13.4	2.8	0.0
LnGrp LOS	C	C		D	C		B	B		B	A	
Approach Vol, veh/h		19			317			1275			1034	
Approach Delay, s/veh		34.9			51.9			17.7			4.2	
Approach LOS		C			D			B			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		85.6		34.4	11.4	74.3		34.4				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		73.5		35.5	10.5	57.5		35.5				
Max Q Clear Time (g_c+I1), s		2.0		2.8	5.8	28.8		28.3				
Green Ext Time (p_c), s		19.1		0.0	0.1	17.9		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			16.7									
HCM 6th LOS			B									

Notes

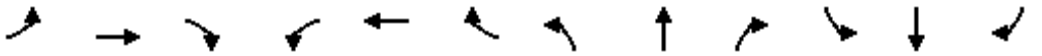
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	18	244	61	12	102	143	992	45	51	659	54
Future Volume (vph)	118	18	244	61	12	102	143	992	45	51	659	54
Lane Group Flow (vph)	0	151	271	0	81	113	159	1102	50	57	732	60
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		1	6			2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	30.5	30.5	15.0	28.5	28.5	28.5	28.5	28.5
Total Split (s)	31.5	31.5	31.5	31.5	31.5	31.5	15.0	88.5	88.5	73.5	73.5	73.5
Total Split (%)	26.3%	26.3%	26.3%	26.3%	26.3%	26.3%	12.5%	73.8%	73.8%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio		0.73	0.56		0.52	0.32	0.36	0.79	0.04	0.27	0.63	0.06
Control Delay		67.3	9.6		56.8	9.9	5.2	18.9	0.1	18.1	21.8	2.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Delay		67.3	9.6		56.8	9.9	5.2	19.1	0.1	18.1	21.8	2.8
Queue Length 50th (ft)		113	0		58	0	2	497	0	24	402	3
Queue Length 95th (ft)		175	70		105	48	31	458	m0	63	635	19
Internal Link Dist (ft)		1001			314			938			742	
Turn Bay Length (ft)			290			230	280			290		350
Base Capacity (vph)		287	562		217	438	446	1387	1226	211	1158	1041
Starvation Cap Reductn		0	0		0	0	0	17	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.53	0.48		0.37	0.26	0.36	0.80	0.04	0.27	0.63	0.06

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 7 (6%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SR 92 & Hall Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	18	244	61	12	102	143	992	45	51	659	54
Future Volume (veh/h)	118	18	244	61	12	102	143	992	45	51	659	54
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1885	1856	1900	1900	1856	1900
Adj Flow Rate, veh/h	131	20	0	68	13	0	159	1102	0	57	732	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	1	3	0	0	3	0
Cap, veh/h	211	24		208	35		512	1475		428	1312	
Arrive On Green	0.11	0.11	0.00	0.11	0.11	0.00	0.08	1.00	0.00	0.71	0.71	0.00
Sat Flow, veh/h	1365	208	1610	1344	310	1610	1795	1856	1610	520	1856	1610
Grp Volume(v), veh/h	151	0	0	81	0	0	159	1102	0	57	732	0
Grp Sat Flow(s),veh/h/ln	1574	0	1610	1654	0	1610	1795	1856	1610	520	1856	1610
Q Serve(g_s), s	5.8	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	4.3	22.9	0.0
Cycle Q Clear(g_c), s	11.1	0.0	0.0	5.3	0.0	0.0	2.9	0.0	0.0	4.3	22.9	0.0
Prop In Lane	0.87		1.00	0.84		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	0		243	0		512	1475		428	1312	
V/C Ratio(X)	0.64	0.00		0.33	0.00		0.31	0.75		0.13	0.56	
Avail Cap(c_a), veh/h	387	0		395	0		579	1475		428	1312	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.76	0.76	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.9	0.0	0.0	49.5	0.0	0.0	6.6	0.0	0.0	5.8	8.5	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.8	0.0	0.0	0.3	2.7	0.0	0.6	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	2.3	0.0	0.0	0.7	1.1	0.0	0.5	8.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	0.0	0.0	50.3	0.0	0.0	6.9	2.7	0.0	6.4	10.2	0.0
LnGrp LOS	D	A		D	A		A	A		A	B	
Approach Vol, veh/h		151			81			1261			789	
Approach Delay, s/veh		54.8			50.3			3.2			9.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.5	90.4		19.1		100.9		19.1				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	9.5	68.0		26.0		83.0		26.0				
Max Q Clear Time (g_c+I1), s	4.9	24.9		13.1		2.0		7.3				
Green Ext Time (p_c), s	0.2	13.5		0.5		32.1		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		10.6	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	23.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	1	56	5	30	1	1102	98	19	733	15
Future Vol, veh/h	1	3	1	56	5	30	1	1102	98	19	733	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	3	0
Mvmt Flow	1	3	1	59	5	32	1	1160	103	20	772	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2052	2085	780	2036	2042	1212	788	0	0	1263	0	0
Stage 1	820	820	-	1214	1214	-	-	-	-	-	-	-
Stage 2	1232	1265	-	822	828	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	42	54	399	~ 43	57	224	840	-	-	557	-	-
Stage 1	372	392	-	224	257	-	-	-	-	-	-	-
Stage 2	219	243	-	371	389	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	32	50	399	~ 39	53	224	840	-	-	557	-	-
Mov Cap-2 Maneuver	32	50	-	~ 39	53	-	-	-	-	-	-	-
Stage 1	371	367	-	223	256	-	-	-	-	-	-	-
Stage 2	184	242	-	343	364	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	80.3	$ 518.6	0	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	840	-	-	53	55	557	-	-
HCM Lane V/C Ratio	0.001	-	-	0.099	1.742	0.036	-	-
HCM Control Delay (s)	9.3	0	-	80.3	$ 518.6	11.7	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	9.1	0.1	-	-

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

Intersection	
Int Delay, s/veh	27.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	179	9	687	345	17	484
Future Vol, veh/h	179	9	687	345	17	484
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	11	4	0	0	3
Mvmt Flow	186	9	716	359	18	504

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1436	896	0	0	1075	0
Stage 1	896	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Critical Hdwy	6.41	6.31	-	-	4.1	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.399	-	-	2.2	-
Pot Cap-1 Maneuver	~ 148	326	-	-	656	-
Stage 1	400	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 142	326	-	-	656	-
Mov Cap-2 Maneuver	~ 142	-	-	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	564	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	250.6	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	146	656	-
HCM Lane V/C Ratio	-	-	1.341	0.027	-
HCM Control Delay (s)	-	-	250.6	10.6	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	12.2	0.1	-

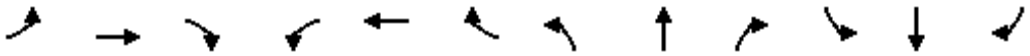
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	8	40	71	37	26	630	26	36	351
Future Volume (vph)	8	40	71	37	26	630	26	36	351
Lane Group Flow (vph)	8	73	74	110	27	656	27	38	379
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Perm	NA
Protected Phases		4		8		6			2
Permitted Phases	4		8		6		6	2	
Detector Phase	4	4	8	8	6	6	6	2	2
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	30.5	30.5	28.5	28.5	28.5	36.5	36.5
Total Split (s)	35.0	35.0	35.0	35.0	85.0	85.0	85.0	85.0	85.0
Total Split (%)	29.2%	29.2%	29.2%	29.2%	70.8%	70.8%	70.8%	70.8%	70.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio	0.07	0.36	0.56	0.47	0.03	0.45	0.02	0.06	0.26
Control Delay	47.5	36.0	66.1	26.8	3.2	6.4	1.6	0.8	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	36.0	66.1	26.8	3.2	6.4	1.6	0.8	0.9
Queue Length 50th (ft)	6	32	56	28	4	173	1	1	12
Queue Length 95th (ft)	21	76	102	82	m8	331	m3	m2	m18
Internal Link Dist (ft)		1123		799		3705			2383
Turn Bay Length (ft)	195				310		200	305	
Base Capacity (vph)	279	458	327	470	818	1462	1260	588	1444
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.16	0.23	0.23	0.03	0.45	0.02	0.06	0.26

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 119 (99%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: SR 92 & Ridge Rd/Butner Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	40	30	71	37	68	26	630	26	36	351	12
Future Volume (veh/h)	8	40	30	71	37	68	26	630	26	36	351	12
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1856	1900	1900	1826	1841	1900	1811	1900
Adj Flow Rate, veh/h	8	42	31	74	39	71	27	656	0	38	366	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	1	3	0	0	5	4	0	6	0
Cap, veh/h	127	116	86	162	67	123	826	1450		596	1438	
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.79	0.79	0.00	0.79	0.79	0.00
Sat Flow, veh/h	1304	1016	750	1338	589	1073	1032	1826	1560	790	1811	0
Grp Volume(v), veh/h	8	0	73	74	0	110	27	656	0	38	366	0
Grp Sat Flow(s),veh/h/ln	1304	0	1765	1338	0	1662	1032	1826	1560	790	1811	0
Q Serve(g_s), s	0.7	0.0	4.6	6.5	0.0	7.5	0.8	13.9	0.0	1.9	6.3	0.0
Cycle Q Clear(g_c), s	8.2	0.0	4.6	11.1	0.0	7.5	7.1	13.9	0.0	15.8	6.3	0.0
Prop In Lane	1.00		0.42	1.00		0.65	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	127	0	202	162	0	190	826	1450		596	1438	
V/C Ratio(X)	0.06	0.00	0.36	0.46	0.00	0.58	0.03	0.45		0.06	0.25	
Avail Cap(c_a), veh/h	299	0	434	338	0	409	826	1450		596	1438	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.3	0.0	49.1	54.2	0.0	50.4	4.1	4.0	0.0	6.5	3.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.1	2.0	0.0	2.8	0.1	1.0	0.0	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.0	2.2	0.0	3.2	0.2	3.8	0.0	0.3	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	0.0	50.2	56.2	0.0	53.2	4.2	5.0	0.0	6.7	3.6	0.0
LnGrp LOS	D	A	D	E	A	D	A	A		A	A	
Approach Vol, veh/h		81			184			683			404	
Approach Delay, s/veh		50.6			54.4			5.0			3.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		100.8		19.2		100.8		19.2				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		79.5		29.5		79.5		29.5				
Max Q Clear Time (g_c+I1), s		17.8		10.2		15.9		13.1				
Green Ext Time (p_c), s		5.3		0.3		11.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		14.1
HCM 6th LOS		B

Notes

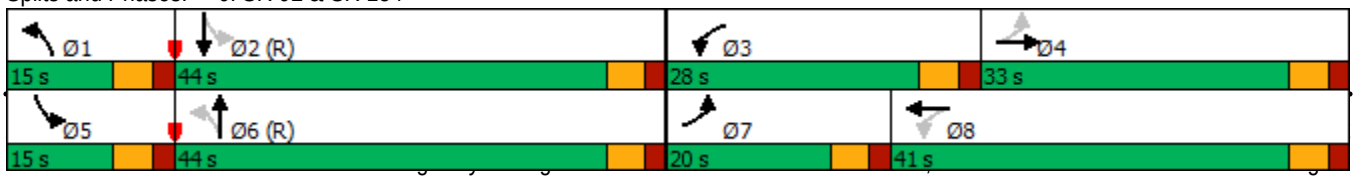
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	231	155	57	286	10	612	61	366
Future Volume (vph)	231	155	57	286	10	612	61	366
Lane Group Flow (vph)	236	165	58	481	10	652	62	611
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	5.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	15.0	28.5	15.0	28.5
Total Split (s)	20.0	33.0	28.0	41.0	15.0	44.0	15.0	44.0
Total Split (%)	16.7%	27.5%	23.3%	34.2%	12.5%	36.7%	12.5%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.86	0.30	0.14	0.94	0.05	0.97	0.36	0.78
Control Delay	56.9	30.1	19.6	66.4	14.6	55.6	25.1	37.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.9	30.1	19.6	66.4	14.6	55.6	25.1	37.3
Queue Length 50th (ft)	121	91	24	339	3	~555	27	376
Queue Length 95th (ft)	#267	155	50	#538	m7	#793	54	#701
Internal Link Dist (ft)		3937		1310		3134		1962
Turn Bay Length (ft)	245		205		195		190	
Base Capacity (vph)	273	553	597	536	248	670	193	779
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.30	0.10	0.90	0.04	0.97	0.32	0.78

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 4 (3%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: SR 92 & SR 154



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	155	7	57	286	185	10	612	27	61	366	233
Future Volume (veh/h)	231	155	7	57	286	185	10	612	27	61	366	233
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1559	1900	1737	1841	1900	1900	1870	1352	1826	1870	1841
Adj Flow Rate, veh/h	236	158	7	58	292	189	10	624	0	62	373	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	23	0	11	4	0	0	2	37	5	2	4
Cap, veh/h	265	543	24	449	306	198	342	707		175	753	
Arrive On Green	0.11	0.37	0.37	0.04	0.29	0.29	0.01	0.38	0.00	0.04	0.40	0.00
Sat Flow, veh/h	1725	1482	66	1654	1044	676	1810	1870	0	1739	1870	0
Grp Volume(v), veh/h	236	0	165	58	0	481	10	624	0	62	373	0
Grp Sat Flow(s),veh/h/ln	1725	0	1547	1654	0	1719	1810	1870	0	1739	1870	0
Q Serve(g_s), s	11.1	0.0	9.1	2.9	0.0	33.0	0.4	37.4	0.0	2.6	17.9	0.0
Cycle Q Clear(g_c), s	11.1	0.0	9.1	2.9	0.0	33.0	0.4	37.4	0.0	2.6	17.9	0.0
Prop In Lane	1.00		0.04	1.00		0.39	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	265	0	567	449	0	503	342	707		175	753	
V/C Ratio(X)	0.89	0.00	0.29	0.13	0.00	0.96	0.03	0.88		0.35	0.50	
Avail Cap(c_a), veh/h	284	0	567	700	0	509	463	707		250	753	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.1	0.0	27.0	28.0	0.0	41.7	23.4	34.8	0.0	27.7	26.7	0.0
Incr Delay (d2), s/veh	26.5	0.0	0.3	0.1	0.0	28.9	0.0	14.9	0.0	1.2	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	3.2	1.1	0.0	17.1	0.2	18.8	0.0	1.1	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.6	0.0	27.2	28.2	0.0	70.5	23.4	49.8	0.0	28.9	29.1	0.0
LnGrp LOS	E	A	C	C	A	E	C	D		C	C	
Approach Vol, veh/h		401			539			634			435	
Approach Delay, s/veh		43.9			66.0			49.3			29.0	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	53.8	9.8	49.5	9.9	50.9	18.6	40.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	22.5	27.5	9.5	38.5	14.5	35.5
Max Q Clear Time (g_c+I1), s	2.4	19.9	4.9	11.1	4.6	39.4	13.1	35.0
Green Ext Time (p_c), s	0.0	3.5	0.1	0.6	0.0	0.0	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	1	2
Conflicting Circle Lanes	1	1	2
Adj Approach Flow, veh/h	560	1194	394
Demand Flow Rate, veh/h	578	1226	402
Vehicles Circulating, veh/h	707	65	454
Vehicles Exiting, veh/h	65	791	831
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	10.1	5.2	6.1
Approach LOS	B	A	A

Lane	Left	Right	Left	Bypass	Left	Right
Designated Moves	L	LTR	T	R	LT	TR
Assumed Moves	L	LTR	T	R	LT	TR
RT Channelized				Free		
Lane Util	0.529	0.471	1.000		0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609		2.667	2.535
Critical Headway, s	4.544	4.544	4.976	519	4.645	4.328
Entry Flow, veh/h	306	272	707	1995	189	213
Cap Entry Lane, veh/h	746	746	1291	0.952	889	965
Entry HV Adj Factor	0.970	0.968	0.990	494	0.981	0.981
Flow Entry, veh/h	297	263	700	1900	185	209
Cap Entry, veh/h	724	722	1279	0.260	872	947
V/C Ratio	0.410	0.365	0.547	0.0	0.213	0.221
Control Delay, s/veh	10.4	9.6	8.9	A	6.3	6.0
LOS	B	A	A	1	A	A
95th %tile Queue, veh	2	2	3		1	1

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	3	34	8	1	45
Future Vol, veh/h	6	3	34	8	1	45
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	17	0	0	0	0	7
Mvmt Flow	6	3	37	9	1	48

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	92	42	0	0	46	0
Stage 1	42	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.57	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	873	1034	-	-	1575	-
Stage 1	943	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	872	1034	-	-	1575	-
Mov Cap-2 Maneuver	872	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	920	1575	-
HCM Lane V/C Ratio	-	-	0.011	0.001	-
HCM Control Delay (s)	-	-	9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	6	41	37	6	27
Future Vol, veh/h	27	6	41	37	6	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	29	7	45	40	7	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	163	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1575	-	832	1046
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1575	-	808	1046
Mov Cap-2 Maneuver	-	-	-	-	808	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	875	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.9	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	993	-	-	1575	-
HCM Lane V/C Ratio	0.036	-	-	0.028	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	7	43	33	2
Future Vol, veh/h	0	7	7	43	33	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	14	0	0	0	50
Mvmt Flow	0	8	8	48	37	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	102	38	39	0	-	0
Stage 1	38	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.4	6.34	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.426	2.2	-	-	-
Pot Cap-1 Maneuver	901	1001	1584	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	896	1001	1584	-	-	-
Mov Cap-2 Maneuver	896	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1584	-	1001	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	136	178	64	48	8
Future Vol, veh/h	6	136	178	64	48	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	1	2	2	0
Mvmt Flow	7	148	193	70	52	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	263	0	-	0	390	228
Stage 1	-	-	-	-	228	-
Stage 2	-	-	-	-	162	-
Critical Hdwy	4.1	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1313	-	-	-	614	816
Stage 1	-	-	-	-	810	-
Stage 2	-	-	-	-	867	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1313	-	-	-	610	816
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	867	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.3
HCM LOS			B

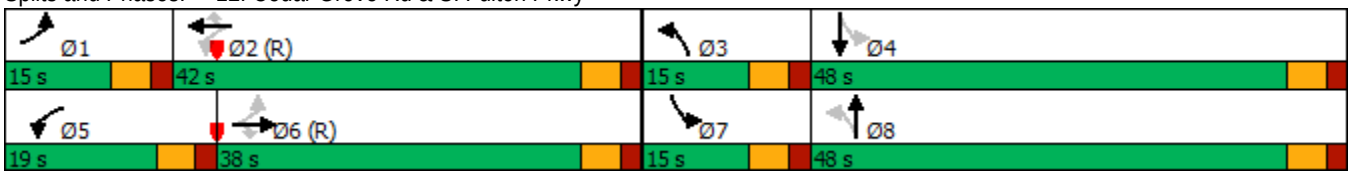
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1313	-	-	-	633
HCM Lane V/C Ratio	0.005	-	-	-	0.096
HCM Control Delay (s)	7.8	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

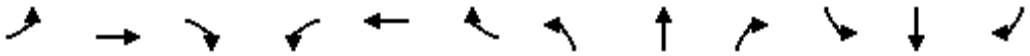
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	20	253	36	220	577	135	30	185	103	132
Future Volume (vph)	20	253	36	220	577	135	30	185	103	132
Lane Group Flow (vph)	21	266	38	232	607	142	32	369	108	152
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	1	6		5	2		3	8	7	4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	3	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	6.0	5.0	6.0
Minimum Split (s)	15.0	31.5	31.5	15.0	28.5	28.5	15.0	45.5	15.0	41.5
Total Split (s)	15.0	38.0	38.0	19.0	42.0	42.0	15.0	48.0	15.0	48.0
Total Split (%)	12.5%	31.7%	31.7%	15.8%	35.0%	35.0%	12.5%	40.0%	12.5%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.05	0.19	0.06	0.37	0.34	0.16	0.08	0.82	0.45	0.28
Control Delay	16.4	27.3	0.2	17.4	20.9	4.5	22.8	53.1	30.5	33.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	27.3	0.2	17.4	20.9	4.5	22.8	53.1	30.5	33.1
Queue Length 50th (ft)	7	71	0	90	130	0	16	244	56	93
Queue Length 95th (ft)	23	123	0	163	244	42	33	325	86	140
Internal Link Dist (ft)		2109			2773			901		3276
Turn Bay Length (ft)	295		150	320		160	65		120	
Base Capacity (vph)	455	1380	686	638	1776	872	411	648	244	654
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.19	0.06	0.36	0.34	0.16	0.08	0.57	0.44	0.23

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 12: Cedar Grove Rd & S. Fulton Pkwy





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	253	36	220	577	135	30	185	165	103	132	12
Future Volume (veh/h)	20	253	36	220	577	135	30	185	165	103	132	12
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1856	1900	1856	1870	1796	1885	1900	1900	1870	1900
Adj Flow Rate, veh/h	21	266	0	232	607	0	32	195	174	108	139	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	0	3	2	7	1	0	0	2	0
Cap, veh/h	424	1538		654	1757		349	218	195	201	455	43
Arrive On Green	0.02	0.43	0.00	0.09	0.50	0.00	0.03	0.24	0.24	0.06	0.27	0.27
Sat Flow, veh/h	1810	3554	1572	1810	3526	1585	1711	918	819	1810	1684	158
Grp Volume(v), veh/h	21	266	0	232	607	0	32	0	369	108	0	152
Grp Sat Flow(s),veh/h/ln	1810	1777	1572	1810	1763	1585	1711	0	1738	1810	0	1842
Q Serve(g_s), s	0.8	5.5	0.0	8.2	12.5	0.0	1.7	0.0	24.7	5.3	0.0	7.9
Cycle Q Clear(g_c), s	0.8	5.5	0.0	8.2	12.5	0.0	1.7	0.0	24.7	5.3	0.0	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.09
Lane Grp Cap(c), veh/h	424	1538		654	1757		349	0	413	201	0	497
V/C Ratio(X)	0.05	0.17		0.35	0.35		0.09	0.00	0.89	0.54	0.00	0.31
Avail Cap(c_a), veh/h	529	1538		701	1757		438	0	615	236	0	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.2	20.9	0.0	15.1	18.2	0.0	33.1	0.0	44.3	34.1	0.0	34.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.3	0.5	0.0	0.1	0.0	11.1	2.2	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	0.3	2.2	0.0	3.1	4.8	0.0	0.7	0.0	11.5	2.4	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	21.1	0.0	15.4	18.8	0.0	33.2	0.0	55.4	36.4	0.0	35.2
LnGrp LOS	B	C		B	B		C	A	E	D	A	D
Approach Vol, veh/h		287			839			401			260	
Approach Delay, s/veh		20.9			17.9			53.6			35.7	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	65.3	8.8	37.9	15.9	57.4	12.7	34.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	36.5	9.5	42.5	13.5	32.5	9.5	42.5
Max Q Clear Time (g_c+I1), s	2.8	14.5	3.7	9.9	10.2	7.5	7.3	26.7
Green Ext Time (p_c), s	0.0	6.5	0.0	0.8	0.2	2.7	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	29.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	5	96	1264	808
Demand Flow Rate, veh/h	5	96	1287	831
Vehicles Circulating, veh/h	874	1185	24	65
Vehicles Exiting, veh/h	22	126	855	1216
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.4	9.4	7.5	5.7
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.471	0.529
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	5	96	605	682	391	440
Cap Entry Lane, veh/h	676	519	1320	1391	1271	1344
Entry HV Adj Factor	1.000	1.000	0.982	0.982	0.971	0.973
Flow Entry, veh/h	5	96	594	670	380	428
Cap Entry, veh/h	676	519	1296	1367	1235	1308
V/C Ratio	0.007	0.185	0.458	0.490	0.308	0.327
Control Delay, s/veh	5.4	9.4	7.4	7.6	5.7	5.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	1	2	3	1	1

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	195	1075	522
Demand Flow Rate, veh/h	198	1104	537
Vehicles Circulating, veh/h	745	18	188
Vehicles Exiting, veh/h	377	707	755
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.9	6.6	5.2
Approach LOS	A	A	A

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	198	519	585	252	285
Cap Entry Lane, veh/h	754	1328	1399	1135	1210
Entry HV Adj Factor	0.985	0.974	0.974	0.973	0.971
Flow Entry, veh/h	195	505	570	245	277
Cap Entry, veh/h	742	1293	1363	1105	1175
V/C Ratio	0.263	0.391	0.418	0.222	0.235
Control Delay, s/veh	7.9	6.5	6.6	5.3	5.2
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	2	1	1

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	81	184	710	416
Demand Flow Rate, veh/h	81	186	744	438
Vehicles Circulating, veh/h	501	724	88	142
Vehicles Exiting, veh/h	67	80	494	768
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.3	9.1	9.4	6.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Bypass	Left	Bypass
Designated Moves	LTR	LTR	LT	R	LT	R
Assumed Moves	LTR	LTR	LT	R	LT	R
RT Channelized				Yield		Yield
Lane Util	1.000	1.000	1.000		1.000	
Follow-Up Headway, s	2.609	2.609	2.609		2.609	
Critical Headway, s	4.976	4.976	4.976	28	4.976	12
Entry Flow, veh/h	81	186	716	1272	426	1289
Cap Entry Lane, veh/h	828	659	1261	0.962	1194	1.000
Entry HV Adj Factor	1.000	0.988	0.954	27	0.948	12
Flow Entry, veh/h	81	184	683	1223	404	1289
Cap Entry, veh/h	828	652	1204	0.022	1132	0.009
V/C Ratio	0.098	0.282	0.568	3.1	0.357	2.9
Control Delay, s/veh	5.3	9.1	9.7	A	6.7	A
LOS	A	A	A	0	A	0
95th %tile Queue, veh	0	1	4		2	

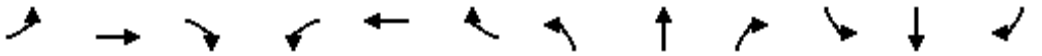
Future “No-Build” Intersection Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	10	84	192	10	65	149	1022	127	67	1023	5
Future Volume (vph)	4	10	84	192	10	65	149	1022	127	67	1023	5
Lane Group Flow (vph)	4	10	87	198	10	67	154	1054	131	69	1055	5
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8			6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	6	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	28.5	28.5	28.5	15.0	32.5	32.5
Total Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	72.5	72.5	72.5	15.0	87.5	87.5
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	60.4%	60.4%	60.4%	12.5%	72.9%	72.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.02	0.03	0.25	0.80	0.03	0.20	0.72	0.47	0.12	0.19	0.78	0.01
Control Delay	37.5	37.8	9.7	68.9	37.8	9.0	40.2	13.1	2.2	3.2	7.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	37.5	37.8	9.7	68.9	37.8	9.0	40.2	13.1	2.2	3.2	7.3	0.0
Queue Length 50th (ft)	3	6	0	147	6	0	79	217	0	5	98	0
Queue Length 95th (ft)	12	21	42	224	21	34	#233	311	27	m9	124	m0
Internal Link Dist (ft)		574			335			1022			938	
Turn Bay Length (ft)	75		175	135		180	270		205	315		290
Base Capacity (vph)	256	427	416	314	427	412	214	2260	1057	391	1359	848
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	39	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.21	0.63	0.02	0.16	0.72	0.47	0.12	0.18	0.80	0.01

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 5 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: SR 92 & Thompson Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	10	84	192	10	65	149	1022	127	67	1023	5
Future Volume (veh/h)	4	10	84	192	10	65	149	1022	127	67	1023	5
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1530	1900	1841	1870	1900	1870	1885	1856	1856	1870	1870	1307
Adj Flow Rate, veh/h	4	10	0	198	10	0	154	1054	0	69	1055	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	25	0	4	2	0	2	1	3	3	2	2	40
Cap, veh/h	241	308		282	308		417	2337		405	1396	
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.00	0.66	0.66	0.00	0.07	1.00	0.00
Sat Flow, veh/h	1149	1900	1560	1405	1900	1585	539	3526	1572	1781	1870	1108
Grp Volume(v), veh/h	4	10	0	198	10	0	154	1054	0	69	1055	0
Grp Sat Flow(s),veh/h/ln	1149	1900	1560	1405	1900	1585	539	1763	1572	1781	1870	1108
Q Serve(g_s), s	0.4	0.5	0.0	16.6	0.5	0.0	16.2	17.3	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.5	0.0	17.1	0.5	0.0	16.2	17.3	0.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	308		282	308		417	2337		405	1396	
V/C Ratio(X)	0.02	0.03		0.70	0.03		0.37	0.45		0.17	0.76	
Avail Cap(c_a), veh/h	313	428		370	428		417	2337		479	1396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.61	0.61	0.00
Uniform Delay (d), s/veh	42.7	42.3	0.0	49.6	42.3	0.0	9.5	9.7	0.0	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.0	0.0	0.0	2.5	0.6	0.0	0.1	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	6.1	0.3	0.0	1.9	6.0	0.0	0.4	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	42.4	0.0	53.5	42.4	0.0	12.0	10.4	0.0	6.6	2.4	0.0
LnGrp LOS	D	D		D	D		B	B		A	A	
Approach Vol, veh/h		14			208			1208			1124	
Approach Delay, s/veh		42.5			53.0			10.6			2.6	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		95.0		25.0	10.0	85.0		25.0				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		82.0		27.0	9.5	67.0		27.0				
Max Q Clear Time (g_c+I1), s		2.0		2.9	3.4	19.3		19.1				
Green Ext Time (p_c), s		28.6		0.0	0.1	23.1		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		10.7
HCM 6th LOS		B

Notes

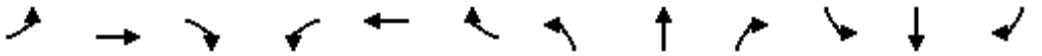
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	32	324	73	118	71	350	571	78	66	697	155
Future Volume (vph)	114	32	324	73	118	71	350	571	78	66	697	155
Lane Group Flow (vph)	0	154	341	0	201	75	368	601	82	69	734	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		1	6			2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	30.5	30.5	15.0	28.5	28.5	28.5	28.5	28.5
Total Split (s)	31.8	31.8	31.8	31.8	31.8	31.8	27.0	88.2	88.2	61.2	61.2	61.2
Total Split (%)	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	22.5%	73.5%	73.5%	51.0%	51.0%	51.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio		0.92	0.58		0.81	0.20	0.82	0.46	0.07	0.17	0.80	0.18
Control Delay		99.1	8.5		70.9	9.9	48.8	12.4	3.1	19.7	34.4	3.3
Queue Delay		0.0	0.1		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		99.1	8.6		71.1	9.9	48.8	12.4	3.1	19.7	34.4	3.3
Queue Length 50th (ft)		114	0		146	0	251	193	0	31	494	0
Queue Length 95th (ft)		#231	78		#249	40	#392	350	31	62	#728	37
Internal Link Dist (ft)		1001			314			938			742	
Turn Bay Length (ft)			290			230	280			290		350
Base Capacity (vph)		191	620		282	412	460	1297	1180	414	920	887
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	9		3	0	0	0	0	0	2	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.81	0.56		0.72	0.18	0.80	0.46	0.07	0.17	0.80	0.18

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 104 (87%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: SR 92 & Hall Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	32	324	73	118	71	350	571	78	66	697	155
Future Volume (veh/h)	114	32	324	73	118	71	350	571	78	66	697	155
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1885	1900	1870	1826	1900	1900	1856	1900
Adj Flow Rate, veh/h	120	34	0	77	124	0	368	601	0	69	734	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	1	0	2	5	0	0	3	0
Cap, veh/h	192	39		138	177		491	1366		552	1099	
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.00	0.22	1.00	0.00	0.59	0.59	0.00
Sat Flow, veh/h	868	246	1610	602	1107	1610	1781	1826	1610	831	1856	1610
Grp Volume(v), veh/h	154	0	0	201	0	0	368	601	0	69	734	0
Grp Sat Flow(s),veh/h/ln	1113	0	1610	1709	0	1610	1781	1826	1610	831	1856	1610
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.0	4.4	32.0	0.0
Cycle Q Clear(g_c), s	16.9	0.0	0.0	13.3	0.0	0.0	10.4	0.0	0.0	4.4	32.0	0.0
Prop In Lane	0.78		1.00	0.38		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	0		316	0		491	1366		552	1099	
V/C Ratio(X)	0.66	0.00		0.64	0.00		0.75	0.44		0.12	0.67	
Avail Cap(c_a), veh/h	313	0		413	0		615	1366		552	1099	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.89	0.89	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.9	0.0	0.0	47.8	0.0	0.0	13.1	0.0	0.0	10.9	16.5	0.0
Incr Delay (d2), s/veh	3.2	0.0	0.0	2.1	0.0	0.0	3.5	0.9	0.0	0.5	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	5.9	0.0	0.0	3.9	0.3	0.0	0.8	13.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	0.0	0.0	50.0	0.0	0.0	16.6	0.9	0.0	11.3	19.7	0.0
LnGrp LOS	D	A		D	A		B	A		B	B	
Approach Vol, veh/h		154			201			969			803	
Approach Delay, s/veh		53.1			50.0			6.9			19.0	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	18.7	76.6		24.7		95.3		24.7				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	21.5	55.7		26.3		82.7		26.3				
Max Q Clear Time (g_c+I1), s	12.4	34.0		18.9		2.0		15.3				
Green Ext Time (p_c), s	0.8	9.7		0.4		9.4		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		18.9	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	4	89	745	1059
Demand Flow Rate, veh/h	4	89	771	1087
Vehicles Circulating, veh/h	1095	686	70	82
Vehicles Exiting, veh/h	74	155	1029	693
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.5	5.7	5.5	7.1
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	4	89	362	409	511	576
Cap Entry Lane, veh/h	560	793	1266	1338	1252	1324
Entry HV Adj Factor	1.000	1.000	0.967	0.966	0.974	0.974
Flow Entry, veh/h	4	89	350	395	498	561
Cap Entry, veh/h	560	793	1224	1292	1219	1290
V/C Ratio	0.007	0.112	0.286	0.306	0.408	0.435
Control Delay, s/veh	6.5	5.7	5.5	5.5	7.0	7.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	2	2

Intersection	
Intersection Delay, s/veh	6.0
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	282	668	726
Demand Flow Rate, veh/h	282	693	754
Vehicles Circulating, veh/h	414	17	266
Vehicles Exiting, veh/h	296	1003	430
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.4	4.9	6.9
Approach LOS	A	A	A

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	282	326	367	354	400
Cap Entry Lane, veh/h	999	1329	1400	1057	1133
Entry HV Adj Factor	1.000	0.963	0.965	0.963	0.961
Flow Entry, veh/h	282	314	354	341	385
Cap Entry, veh/h	999	1280	1351	1018	1089
V/C Ratio	0.282	0.245	0.262	0.335	0.353
Control Delay, s/veh	6.4	4.9	4.9	7.0	6.9
LOS	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	2

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	125	157	420	664
Demand Flow Rate, veh/h	126	157	438	693
Vehicles Circulating, veh/h	711	429	144	166
Vehicles Exiting, veh/h	117	122	693	420
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	5.8	6.3	9.9
Approach LOS	A	A	A	A

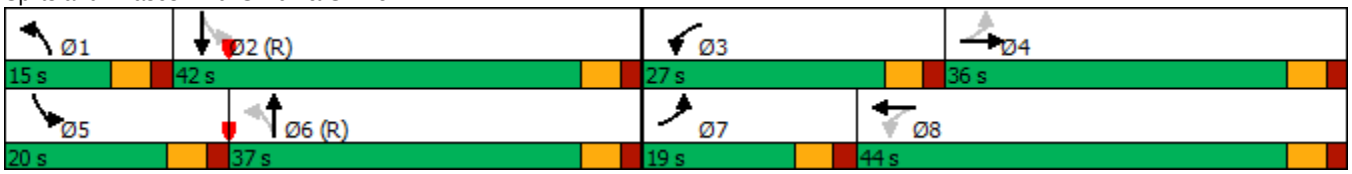
Lane	Left	Left	Left	Bypass	Left	Bypass
Designated Moves	LTR	LTR	LT	R	LT	R
Assumed Moves	LTR	LTR	LT	R	LT	R
RT Channelized				Yield		Yield
Lane Util	1.000	1.000	1.000		1.000	
Follow-Up Headway, s	2.609	2.609	2.609		2.609	
Critical Headway, s	4.976	4.976	4.976	31	4.976	31
Entry Flow, veh/h	126	157	407	1218	662	1225
Cap Entry Lane, veh/h	668	891	1191	1.000	1165	1.000
Entry HV Adj Factor	0.991	1.000	0.956	31	0.957	31
Flow Entry, veh/h	125	157	389	1218	633	1225
Cap Entry, veh/h	662	891	1139	0.025	1115	0.025
V/C Ratio	0.189	0.176	0.342	3.2	0.568	3.1
Control Delay, s/veh	7.6	5.8	6.5	A	10.2	A
LOS	A	A	A	0	B	0
95th %tile Queue, veh	1	1	2		4	

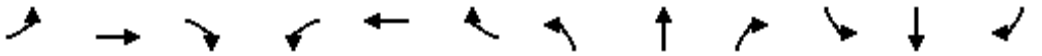
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	215	260	41	160	19	305	240	522
Future Volume (vph)	215	260	41	160	19	305	240	522
Lane Group Flow (vph)	229	304	44	231	20	361	255	737
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	5.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	15.0	28.5	15.0	28.5
Total Split (s)	19.0	36.0	27.0	44.0	15.0	37.0	20.0	42.0
Total Split (%)	15.8%	30.0%	22.5%	36.7%	12.5%	30.8%	16.7%	35.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.74	0.71	0.20	0.77	0.09	0.51	0.50	0.79
Control Delay	44.3	50.9	27.0	59.3	15.8	33.0	17.9	32.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	50.9	27.0	59.3	15.8	33.0	17.9	32.8
Queue Length 50th (ft)	135	219	23	160	6	205	95	395
Queue Length 95th (ft)	184	301	45	230	21	365	170	#860
Internal Link Dist (ft)		3937		1310		3134		1962
Turn Bay Length (ft)	245		205		195		190	
Base Capacity (vph)	311	452	384	518	279	707	524	934
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.67	0.11	0.45	0.07	0.51	0.49	0.79

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 115 (96%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	260	25	41	160	57	19	305	35	240	522	171
Future Volume (veh/h)	215	260	25	41	160	57	19	305	35	240	522	171
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1737	1900	1633	1663	1707	1900	1826	1811	1870	1856	1811
Adj Flow Rate, veh/h	229	277	27	44	170	61	20	324	0	255	555	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	11	0	18	16	13	0	5	6	2	3	6
Cap, veh/h	280	386	38	190	195	70	366	810		568	959	
Arrive On Green	0.11	0.25	0.25	0.03	0.17	0.17	0.02	0.44	0.00	0.09	0.52	0.00
Sat Flow, veh/h	1711	1558	152	1555	1168	419	1810	1826	0	1781	1856	0
Grp Volume(v), veh/h	229	0	304	44	0	231	20	324	0	255	555	0
Grp Sat Flow(s),veh/h/ln	1711	0	1710	1555	0	1587	1810	1826	0	1781	1856	0
Q Serve(g_s), s	13.1	0.0	19.5	2.8	0.0	17.0	0.7	14.4	0.0	8.9	24.7	0.0
Cycle Q Clear(g_c), s	13.1	0.0	19.5	2.8	0.0	17.0	0.7	14.4	0.0	8.9	24.7	0.0
Prop In Lane	1.00		0.09	1.00		0.26	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	280	0	423	190	0	265	366	810		568	959	
V/C Ratio(X)	0.82	0.00	0.72	0.23	0.00	0.87	0.05	0.40		0.45	0.58	
Avail Cap(c_a), veh/h	280	0	435	418	0	509	473	810		617	959	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.1	0.0	41.3	40.0	0.0	48.7	18.5	22.6	0.0	15.4	20.0	0.0
Incr Delay (d2), s/veh	16.9	0.0	5.5	0.6	0.0	8.6	0.1	1.5	0.0	0.6	2.5	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	6.5	0.0	8.4	1.1	0.0	7.1	0.3	6.1	0.0	3.4	10.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	0.0	46.8	40.6	0.0	57.3	18.6	24.0	0.0	16.0	22.5	0.0
LnGrp LOS	D	A	D	D	A	E	B	C		B	C	
Approach Vol, veh/h		533			275			344			810	
Approach Delay, s/veh		49.5			54.6			23.7			20.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	67.5	9.3	35.2	16.7	58.8	19.0	25.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	36.5	21.5	30.5	14.5	31.5	13.5	38.5
Max Q Clear Time (g_c+I1), s	2.7	26.7	4.8	21.5	10.9	16.4	15.1	19.0
Green Ext Time (p_c), s	0.0	3.8	0.1	1.0	0.2	2.7	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.4
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	1	2
Conflicting Circle Lanes	1	1	2
Adj Approach Flow, veh/h	607	641	701
Demand Flow Rate, veh/h	646	680	710
Vehicles Circulating, veh/h	327	94	554
Vehicles Exiting, veh/h	94	1170	419
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.8	2.6	9.4
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left	Right
Designated Moves	L	LTR	T	R	LT	TR
Assumed Moves	L	LTR	T	R	LT	TR
RT Channelized				Free		
Lane Util	0.529	0.471	1.000		0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609		2.667	2.535
Critical Headway, s	4.544	4.544	4.976	353	4.645	4.328
Entry Flow, veh/h	342	304	327	2052	334	376
Cap Entry Lane, veh/h	1055	1055	1254	0.926	811	887
Entry HV Adj Factor	0.941	0.938	0.962	327	0.986	0.988
Flow Entry, veh/h	322	285	314	1900	329	371
Cap Entry, veh/h	992	990	1205	0.172	800	876
V/C Ratio	0.324	0.288	0.261	0.0	0.412	0.424
Control Delay, s/veh	7.0	6.5	5.3	A	9.7	9.2
LOS	A	A	A	1	A	A
95th %tile Queue, veh	1	1	1		2	2

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	4	39	11	5	39
Future Vol, veh/h	7	4	39	11	5	39
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	8	10	0	0
Mvmt Flow	9	5	48	14	6	48

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	115	55	0	0	62	0
Stage 1	55	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	886	1018	-	-	1554	-
Stage 1	973	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	882	1018	-	-	1554	-
Mov Cap-2 Maneuver	882	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	927	1554	-
HCM Lane V/C Ratio	-	-	0.015	0.004	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	32	14	30	34	8	49
Future Vol, veh/h	32	14	30	34	8	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	23	0	0	0	2
Mvmt Flow	42	18	39	44	10	64

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	60	0	173	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	122	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1556	-	822	1017
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1556	-	801	1017
Mov Cap-2 Maneuver	-	-	-	-	801	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	884	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	980	-	-	1556	-
HCM Lane V/C Ratio	0.076	-	-	0.025	-
HCM Control Delay (s)	9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	7	7	37	60	1
Future Vol, veh/h	3	7	7	37	60	1
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	33	0	0	3	2	0
Mvmt Flow	4	9	9	49	79	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	147	80	80	0	-	0
Stage 1	80	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.73	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	778	986	1531	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	773	986	1531	-	-	-
Mov Cap-2 Maneuver	773	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1531	-	911	-	-
HCM Lane V/C Ratio	0.006	-	0.014	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	156	109	46	66	12
Future Vol, veh/h	5	156	109	46	66	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	2	4	2	0	0
Mvmt Flow	6	184	128	54	78	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	182	0	-	0	351	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	196	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1405	-	-	-	650	896
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	842	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1405	-	-	-	647	896
Mov Cap-2 Maneuver	-	-	-	-	647	-
Stage 1	-	-	-	-	874	-
Stage 2	-	-	-	-	842	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.2
HCM LOS			B

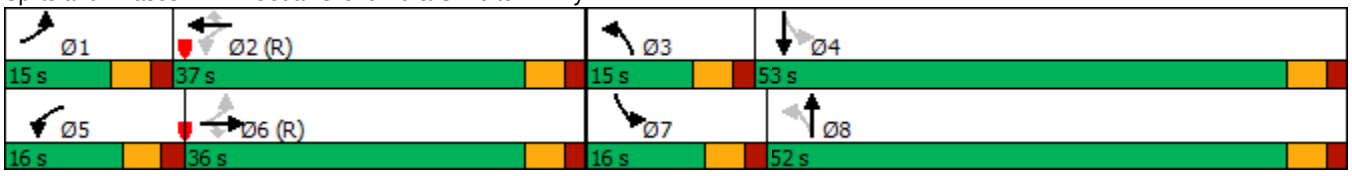
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1405	-	-	-	676
HCM Lane V/C Ratio	0.004	-	-	-	0.136
HCM Control Delay (s)	7.6	0	-	-	11.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

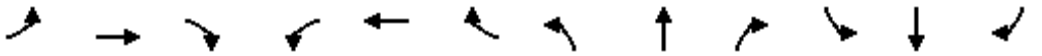
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	29	677	35	135	315	89	15	93	169	158
Future Volume (vph)	29	677	35	135	315	89	15	93	169	158
Lane Group Flow (vph)	33	778	40	155	362	102	17	427	194	204
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	1	6		5	2		3	8	7	4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	3	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	6.0	5.0	6.0
Minimum Split (s)	15.0	31.5	31.5	15.0	28.5	28.5	15.0	45.5	15.0	41.5
Total Split (s)	15.0	36.0	36.0	16.0	37.0	37.0	15.0	52.0	16.0	53.0
Total Split (%)	12.5%	30.0%	30.0%	13.3%	30.8%	30.8%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.07	0.55	0.06	0.46	0.22	0.12	0.05	0.85	0.87	0.33
Control Delay	17.2	32.2	0.1	20.7	22.0	3.4	20.9	43.9	61.2	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.2	32.2	0.1	20.7	22.0	3.4	20.9	43.9	61.2	30.8
Queue Length 50th (ft)	12	240	0	58	90	0	8	217	106	108
Queue Length 95th (ft)	33	362	0	113	146	24	19	283	#176	165
Internal Link Dist (ft)		2109			2773			901		3276
Turn Bay Length (ft)	295		150	320		160	65		120	
Base Capacity (vph)	513	1411	718	344	1666	824	424	733	224	737
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.55	0.06	0.45	0.22	0.12	0.04	0.58	0.87	0.28

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Cedar Grove Rd & S. Fulton Pkwy





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	677	35	135	315	89	15	93	278	169	158	19
Future Volume (veh/h)	29	677	35	135	315	89	15	93	278	169	158	19
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1900	1885	1856	1885	1900	1856	1885	1885	1885	1900
Adj Flow Rate, veh/h	33	778	0	155	362	0	17	107	320	194	182	22
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	2	0	1	3	1	0	3	1	1	1	0
Cap, veh/h	448	1328		322	1461		424	118	352	251	588	71
Arrive On Green	0.03	0.37	0.00	0.07	0.41	0.00	0.02	0.29	0.29	0.09	0.36	0.36
Sat Flow, veh/h	1711	3554	1610	1795	3526	1598	1810	410	1225	1795	1650	199
Grp Volume(v), veh/h	33	778	0	155	362	0	17	0	427	194	0	204
Grp Sat Flow(s),veh/h/ln	1711	1777	1610	1795	1763	1598	1810	0	1635	1795	0	1849
Q Serve(g_s), s	1.4	21.1	0.0	6.2	8.0	0.0	0.8	0.0	30.2	8.9	0.0	9.6
Cycle Q Clear(g_c), s	1.4	21.1	0.0	6.2	8.0	0.0	0.8	0.0	30.2	8.9	0.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		0.11
Lane Grp Cap(c), veh/h	448	1328		322	1461		424	0	469	251	0	659
V/C Ratio(X)	0.07	0.59		0.48	0.25		0.04	0.00	0.91	0.77	0.00	0.31
Avail Cap(c_a), veh/h	536	1328		356	1461		534	0	634	251	0	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.0	30.1	0.0	22.3	22.9	0.0	29.3	0.0	41.3	30.1	0.0	27.9
Incr Delay (d2), s/veh	0.1	1.9	0.0	1.1	0.4	0.0	0.0	0.0	14.1	13.9	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	0.5	8.7	0.0	2.5	3.2	0.0	0.3	0.0	13.5	4.6	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	32.0	0.0	23.4	23.3	0.0	29.3	0.0	55.3	44.0	0.0	28.2
LnGrp LOS	C	C		C	C		C	A	E	D	A	C
Approach Vol, veh/h		811			517			444			398	
Approach Delay, s/veh		31.6			23.4			54.4			35.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	55.2	7.7	48.3	13.7	50.3	16.0	39.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	31.5	9.5	47.5	10.5	30.5	10.5	46.5
Max Q Clear Time (g_c+I1), s	3.4	10.0	2.8	11.6	8.2	23.1	10.9	32.2
Green Ext Time (p_c), s	0.0	3.6	0.0	1.1	0.1	4.1	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	35.1
HCM 6th LOS	D

Notes

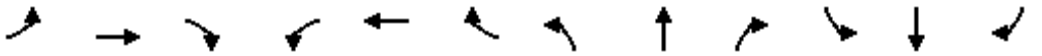
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	11	92	305	4	92	63	1181	109	138	871
Future Volume (vph)	7	11	92	305	4	92	63	1181	109	138	871
Lane Group Flow (vph)	8	12	100	332	4	100	68	1284	118	150	947
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases		4			8			6		5	2
Permitted Phases	4		4	8		8	6		6	2	
Detector Phase	4	4	4	8	8	8	6	6	6	5	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	5.0	15.0
Minimum Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	28.5	28.5	28.5	15.0	32.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	65.0	65.0	65.0	15.0	80.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	54.2%	54.2%	54.2%	12.5%	66.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lag	Lag	Lag	Lead	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	None	C-Min
v/c Ratio	0.02	0.02	0.21	0.89	0.01	0.20	0.41	0.69	0.13	0.60	0.79
Control Delay	31.0	31.2	7.3	69.4	30.8	7.2	28.7	24.3	5.0	26.8	17.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	31.2	7.3	69.4	30.8	7.2	28.7	24.3	5.0	26.8	17.9
Queue Length 50th (ft)	5	7	0	241	2	0	33	399	8	49	292
Queue Length 95th (ft)	17	22	41	#389	11	41	82	490	40	m120	493
Internal Link Dist (ft)		574			335			1022			938
Turn Bay Length (ft)	75		175	135		180	270		205	315	
Base Capacity (vph)	412	546	505	409	437	535	165	1856	892	262	1195
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	2
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.20	0.81	0.01	0.19	0.41	0.69	0.13	0.57	0.79

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 1 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: SR 92 & Thompson Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	11	92	305	4	92	63	1181	109	138	871	0
Future Volume (veh/h)	7	11	92	305	4	92	63	1181	109	138	871	0
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1796	1900	1530	1900	1752	1856	1885	1900	1856	1900
Adj Flow Rate, veh/h	8	12	0	332	4	0	68	1284	0	150	947	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	7	0	25	0	10	3	1	0	3	0
Cap, veh/h	421	481		414	388		369	1963		287	1215	
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.00	0.56	0.56	0.00	0.10	1.00	0.00
Sat Flow, veh/h	1435	1900	1522	1424	1530	1610	555	3526	1598	1810	1856	1610
Grp Volume(v), veh/h	8	12	0	332	4	0	68	1284	0	150	947	0
Grp Sat Flow(s),veh/h/ln	1435	1900	1522	1424	1530	1610	555	1763	1598	1810	1856	1610
Q Serve(g_s), s	0.5	0.6	0.0	27.4	0.2	0.0	7.4	30.5	0.0	4.2	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.6	0.0	28.0	0.2	0.0	7.4	30.5	0.0	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	421	481		414	388		369	1963		287	1215	
V/C Ratio(X)	0.02	0.02		0.80	0.01		0.18	0.65		0.52	0.78	
Avail Cap(c_a), veh/h	470	546		463	440		369	1963		336	1215	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.72	0.72	0.00
Uniform Delay (d), s/veh	33.8	33.7	0.0	44.2	33.5	0.0	13.4	18.5	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.9	0.0	0.0	1.1	1.7	0.0	1.1	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	10.6	0.1	0.0	1.0	11.8	0.0	1.5	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	33.7	0.0	53.1	33.5	0.0	14.5	20.3	0.0	15.9	3.6	0.0
LnGrp LOS	C	C		D	C		B	C		B	A	
Approach Vol, veh/h		20			336			1352			1097	
Approach Delay, s/veh		33.7			52.8			20.0			5.3	
Approach LOS		C			D			B			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		84.1		35.9	11.8	72.3		35.9				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		74.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s		2.0		2.7	6.2	32.5		30.0				
Green Ext Time (p_c), s		21.7		0.0	0.1	18.2		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			18.3									
HCM 6th LOS			B									

Notes

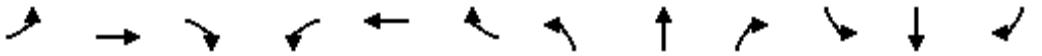
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	19	259	65	13	108	152	1052	48	54	699	57
Future Volume (vph)	125	19	259	65	13	108	152	1052	48	54	699	57
Lane Group Flow (vph)	0	160	288	0	86	120	169	1169	53	60	777	63
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		1	6			2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	30.5	30.5	15.0	28.5	28.5	28.5	28.5	28.5
Total Split (s)	31.5	31.5	31.5	31.5	31.5	31.5	15.0	88.5	88.5	73.5	73.5	73.5
Total Split (%)	26.3%	26.3%	26.3%	26.3%	26.3%	26.3%	12.5%	73.8%	73.8%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio		0.75	0.57		0.55	0.33	0.42	0.85	0.04	0.38	0.67	0.06
Control Delay		68.6	9.4		58.4	10.2	8.9	22.5	0.1	22.2	19.6	2.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		68.6	9.4		58.4	10.2	8.9	22.5	0.1	22.2	19.6	2.2
Queue Length 50th (ft)		119	0		62	2	7	498	0	21	364	0
Queue Length 95th (ft)		186	73		111	51	m37	#527	m0	70	593	16
Internal Link Dist (ft)		1001			314			938			742	
Turn Bay Length (ft)			290			230	280			290		350
Base Capacity (vph)		285	575		209	441	411	1377	1218	158	1152	1036
Starvation Cap Reductn		0	0		0	0	0	2	0	0	0	0
Spillback Cap Reductn		0	1		0	0	0	0	0	0	7	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.56	0.50		0.41	0.27	0.41	0.85	0.04	0.38	0.68	0.06

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SR 92 & Hall Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	19	259	65	13	108	152	1052	48	54	699	57
Future Volume (veh/h)	125	19	259	65	13	108	152	1052	48	54	699	57
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1885	1856	1900	1900	1856	1900
Adj Flow Rate, veh/h	139	21	0	72	14	0	169	1169	0	60	777	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	1	3	0	0	3	0
Cap, veh/h	219	25		216	37		476	1463		401	1296	
Arrive On Green	0.12	0.12	0.00	0.12	0.12	0.00	0.09	1.00	0.00	0.70	0.70	0.00
Sat Flow, veh/h	1361	206	1610	1344	313	1610	1795	1856	1610	488	1856	1610
Grp Volume(v), veh/h	160	0	0	86	0	0	169	1169	0	60	777	0
Grp Sat Flow(s),veh/h/ln	1566	0	1610	1657	0	1610	1795	1856	1610	488	1856	1610
Q Serve(g_s), s	6.2	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	5.1	26.1	0.0
Cycle Q Clear(g_c), s	11.8	0.0	0.0	5.6	0.0	0.0	3.2	0.0	0.0	5.1	26.1	0.0
Prop In Lane	0.87		1.00	0.84		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	0		254	0		476	1463		401	1296	
V/C Ratio(X)	0.66	0.00		0.34	0.00		0.35	0.80		0.15	0.60	
Avail Cap(c_a), veh/h	386	0		396	0		539	1463		401	1296	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.71	0.71	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.5	0.0	0.0	48.9	0.0	0.0	7.7	0.0	0.0	6.2	9.4	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.0	0.8	0.0	0.0	0.3	3.3	0.0	0.8	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	2.5	0.0	0.0	0.9	1.4	0.0	0.5	9.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	0.0	0.0	49.7	0.0	0.0	8.1	3.3	0.0	7.0	11.5	0.0
LnGrp LOS	D	A		D	A		A	A		A	B	
Approach Vol, veh/h		160			86			1338			837	
Approach Delay, s/veh		54.5			49.7			3.9			11.1	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.8	89.3		19.9		100.1		19.9				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	9.5	68.0		26.0		83.0		26.0				
Max Q Clear Time (g_c+I1), s	5.2	28.1		13.8		2.0		7.6				
Green Ext Time (p_c), s	0.2	14.5		0.5		37.3		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		11.4	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	5	101	1339	856
Demand Flow Rate, veh/h	5	101	1364	881
Vehicles Circulating, veh/h	926	1256	25	68
Vehicles Exiting, veh/h	23	133	906	1289
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.7	10.3	7.9	6.0
Approach LOS	A	B	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	5	101	641	723	414	467
Cap Entry Lane, veh/h	646	488	1319	1390	1268	1340
Entry HV Adj Factor	1.000	1.000	0.982	0.982	0.972	0.972
Flow Entry, veh/h	5	101	630	710	403	454
Cap Entry, veh/h	646	488	1296	1365	1233	1303
V/C Ratio	0.008	0.207	0.486	0.520	0.327	0.348
Control Delay, s/veh	5.7	10.3	7.8	8.1	6.0	6.0
LOS	A	B	A	A	A	A
95th %tile Queue, veh	0	1	3	3	1	2

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	208	1139	553
Demand Flow Rate, veh/h	211	1169	569
Vehicles Circulating, veh/h	788	19	200
Vehicles Exiting, veh/h	400	750	799
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.5	6.9	5.4
Approach LOS	A	A	A

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	211	549	620	267	302
Cap Entry Lane, veh/h	727	1326	1397	1123	1198
Entry HV Adj Factor	0.986	0.975	0.973	0.973	0.970
Flow Entry, veh/h	208	535	604	260	293
Cap Entry, veh/h	716	1293	1360	1093	1163
V/C Ratio	0.290	0.414	0.444	0.238	0.252
Control Delay, s/veh	8.5	6.8	7.0	5.5	5.4
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	2	1	1

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	85	194	754	442
Demand Flow Rate, veh/h	85	196	790	465
Vehicles Circulating, veh/h	530	768	92	150
Vehicles Exiting, veh/h	71	84	523	814
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	9.9	10.2	6.9
Approach LOS	A	A	B	A

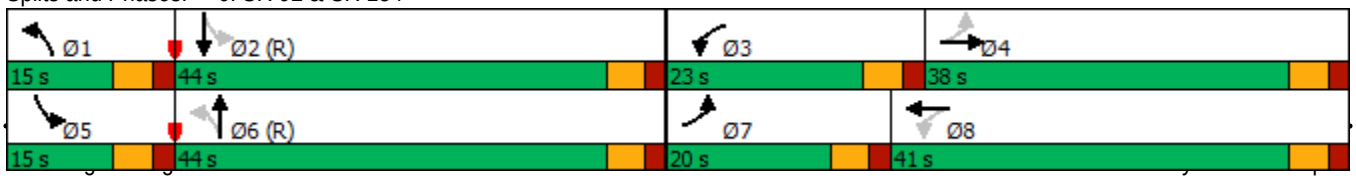
Lane	Left	Left	Left	Bypass	Left	Bypass
Designated Moves	LTR	LTR	LT	R	LT	R
Assumed Moves	LTR	LTR	LT	R	LT	R
RT Channelized				Yield		Yield
Lane Util	1.000	1.000	1.000		1.000	
Follow-Up Headway, s	2.609	2.609	2.609		2.609	
Critical Headway, s	4.976	4.976	4.976	30	4.976	14
Entry Flow, veh/h	85	196	760	1267	451	1283
Cap Entry Lane, veh/h	804	630	1256	0.962	1184	1.000
Entry HV Adj Factor	1.000	0.989	0.954	29	0.948	14
Flow Entry, veh/h	85	194	725	1218	428	1283
Cap Entry, veh/h	804	623	1199	0.024	1123	0.011
V/C Ratio	0.106	0.311	0.605	3.1	0.381	2.9
Control Delay, s/veh	5.5	9.9	10.5	A	7.1	A
LOS	A	A	B	0	A	0
95th %tile Queue, veh	0	1	4		2	

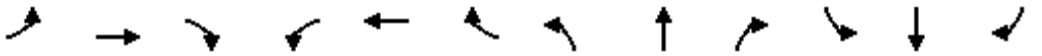
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	245	164	60	303	11	649	65	388
Future Volume (vph)	245	164	60	303	11	649	65	388
Lane Group Flow (vph)	250	174	61	509	11	692	66	648
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	5.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	15.0	28.5	15.0	28.5
Total Split (s)	20.0	38.0	23.0	41.0	15.0	44.0	15.0	44.0
Total Split (%)	16.7%	31.7%	19.2%	34.2%	12.5%	36.7%	12.5%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.95	0.31	0.14	0.96	0.07	1.06	0.38	0.85
Control Delay	75.5	30.2	19.5	71.4	19.9	90.7	25.7	42.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	30.2	19.5	71.4	19.9	90.7	25.7	42.1
Queue Length 50th (ft)	144	97	26	368	5	~627	29	413
Queue Length 95th (ft)	#310	163	52	#587	16	#881	57	#763
Internal Link Dist (ft)		3937		1310		3134		1962
Turn Bay Length (ft)	245		205		195		190	
Base Capacity (vph)	264	564	559	536	209	653	193	765
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.31	0.11	0.95	0.05	1.06	0.34	0.85

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	164	7	60	303	196	11	649	29	65	388	247
Future Volume (veh/h)	245	164	7	60	303	196	11	649	29	65	388	247
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1559	1900	1737	1841	1900	1900	1870	1352	1826	1870	1841
Adj Flow Rate, veh/h	250	167	7	61	309	200	11	662	0	66	396	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	23	0	11	4	0	0	2	37	5	2	4
Cap, veh/h	268	564	24	454	309	200	307	679		135	724	
Arrive On Green	0.12	0.38	0.38	0.04	0.30	0.30	0.01	0.36	0.00	0.04	0.39	0.00
Sat Flow, veh/h	1725	1486	62	1654	1044	675	1810	1870	0	1739	1870	0
Grp Volume(v), veh/h	250	0	174	61	0	509	11	662	0	66	396	0
Grp Sat Flow(s),veh/h/ln	1725	0	1548	1654	0	1719	1810	1870	0	1739	1870	0
Q Serve(g_s), s	13.0	0.0	9.4	3.1	0.0	35.5	0.5	41.9	0.0	2.8	19.8	0.0
Cycle Q Clear(g_c), s	13.0	0.0	9.4	3.1	0.0	35.5	0.5	41.9	0.0	2.8	19.8	0.0
Prop In Lane	1.00		0.04	1.00		0.39	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	268	0	587	454	0	509	307	679		135	724	
V/C Ratio(X)	0.93	0.00	0.30	0.13	0.00	1.00	0.04	0.98		0.49	0.55	
Avail Cap(c_a), veh/h	268	0	587	634	0	509	427	679		208	724	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.2	0.0	26.0	27.7	0.0	42.3	24.7	37.7	0.0	30.2	28.6	0.0
Incr Delay (d2), s/veh	37.0	0.0	0.3	0.1	0.0	40.1	0.0	29.0	0.0	2.7	3.0	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	7.1	0.0	3.3	1.2	0.0	19.7	0.2	23.3	0.0	1.2	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.2	0.0	26.3	27.8	0.0	82.4	24.8	66.7	0.0	32.9	31.5	0.0
LnGrp LOS	E	A	C	C	A	F	C	E		C	C	
Approach Vol, veh/h		424			570			673			462	
Approach Delay, s/veh		52.8			76.5			66.0			31.7	
Approach LOS		D			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	52.0	10.0	51.0	9.9	49.1	20.0	41.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	17.5	32.5	9.5	38.5	14.5	35.5
Max Q Clear Time (g_c+I1), s	2.5	21.8	5.1	11.4	4.8	43.9	15.0	37.5
Green Ext Time (p_c), s	0.0	3.6	0.1	0.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.7
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	1	2
Conflicting Circle Lanes	1	1	2
Adj Approach Flow, veh/h	593	1266	417
Demand Flow Rate, veh/h	613	1299	425
Vehicles Circulating, veh/h	749	69	482
Vehicles Exiting, veh/h	69	838	880
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	11.2	5.6	6.5
Approach LOS	B	A	A

Lane	Left	Right	Left	Bypass	Left	Right
Designated Moves	L	LTR	T	R	LT	TR
Assumed Moves	L	LTR	T	R	LT	TR
RT Channelized				Free		
Lane Util	0.530	0.470	1.000		0.471	0.529
Follow-Up Headway, s	2.535	2.535	2.609		2.667	2.535
Critical Headway, s	4.544	4.544	4.976	550	4.645	4.328
Entry Flow, veh/h	325	288	749	1995	200	225
Cap Entry Lane, veh/h	718	718	1286	0.952	866	943
Entry HV Adj Factor	0.967	0.968	0.990	524	0.980	0.982
Flow Entry, veh/h	314	279	742	1900	196	221
Cap Entry, veh/h	695	695	1273	0.276	849	926
V/C Ratio	0.452	0.401	0.582	0.0	0.231	0.239
Control Delay, s/veh	11.7	10.6	9.6	A	6.7	6.3
LOS	B	B	A	1	A	A
95th %tile Queue, veh	2	2	4		1	1

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	3	36	8	1	48
Future Vol, veh/h	6	3	36	8	1	48
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	17	0	0	0	0	7
Mvmt Flow	6	3	39	9	1	52

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	98	44	0	0	48	0
Stage 1	44	-	-	-	-	-
Stage 2	54	-	-	-	-	-
Critical Hdwy	6.57	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	866	1032	-	-	1572	-
Stage 1	941	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	865	1032	-	-	1572	-
Mov Cap-2 Maneuver	865	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	914	1572	-
HCM Lane V/C Ratio	-	-	0.011	0.001	-
HCM Control Delay (s)	-	-	9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	6	43	39	6	29
Future Vol, veh/h	29	6	43	39	6	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	32	7	47	42	7	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	39	0	172	36
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1571	-	823	1042
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1571	-	797	1042
Mov Cap-2 Maneuver	-	-	-	-	797	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	867	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.9	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	990	-	-	1571	-
HCM Lane V/C Ratio	0.038	-	-	0.03	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	7	46	35	2
Future Vol, veh/h	0	7	7	46	35	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	14	0	0	0	50
Mvmt Flow	0	8	8	52	39	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	108	40	41	0	-	0
Stage 1	40	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.4	6.34	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.426	2.2	-	-	-
Pot Cap-1 Maneuver	894	998	1581	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	960	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	890	998	1581	-	-	-
Mov Cap-2 Maneuver	890	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1581	-	998	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	144	189	68	51	8
Future Vol, veh/h	6	144	189	68	51	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	1	2	2	0
Mvmt Flow	7	157	205	74	55	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	279	0	-	0	413	242
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	171	-
Critical Hdwy	4.1	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1295	-	-	-	595	802
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	859	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1295	-	-	-	591	802
Mov Cap-2 Maneuver	-	-	-	-	591	-
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	859	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.6
HCM LOS			B

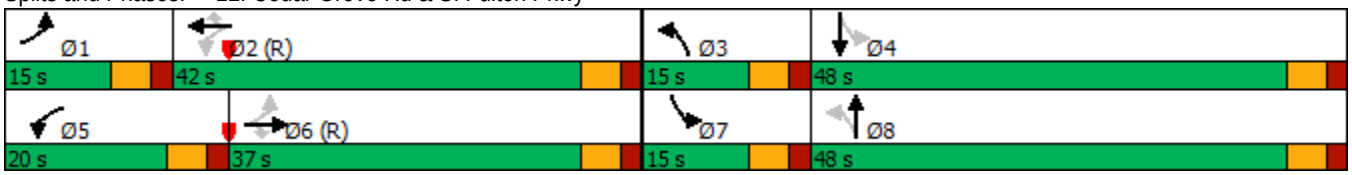
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1295	-	-	-	613
HCM Lane V/C Ratio	0.005	-	-	-	0.105
HCM Control Delay (s)	7.8	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

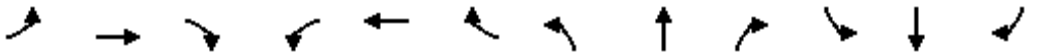
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	21	268	38	233	612	143	32	196	109	140
Future Volume (vph)	21	268	38	233	612	143	32	196	109	140
Lane Group Flow (vph)	22	282	40	245	644	151	34	390	115	161
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	1	6		5	2		3	8	7	4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	3	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	6.0	5.0	6.0
Minimum Split (s)	15.0	31.5	31.5	15.0	28.5	28.5	15.0	45.5	15.0	41.5
Total Split (s)	15.0	37.0	37.0	20.0	42.0	42.0	15.0	48.0	15.0	48.0
Total Split (%)	12.5%	30.8%	30.8%	16.7%	35.0%	35.0%	12.5%	40.0%	12.5%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.06	0.21	0.06	0.41	0.39	0.18	0.09	0.83	0.48	0.28
Control Delay	17.3	28.7	0.2	18.7	23.8	5.5	22.0	53.0	30.5	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	28.7	0.2	18.7	23.8	5.5	22.0	53.0	30.5	32.2
Queue Length 50th (ft)	8	78	0	99	178	4	17	259	59	97
Queue Length 95th (ft)	25	132	0	177	267	50	34	342	89	144
Internal Link Dist (ft)		2109			2773			901		3276
Turn Bay Length (ft)	295		150	320		160	65		120	
Base Capacity (vph)	430	1323	663	616	1663	825	423	648	243	654
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.21	0.06	0.40	0.39	0.18	0.08	0.60	0.47	0.25

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 12: Cedar Grove Rd & S. Fulton Pkwy





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	268	38	233	612	143	32	196	175	109	140	13
Future Volume (veh/h)	21	268	38	233	612	143	32	196	175	109	140	13
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1856	1900	1856	1870	1796	1885	1900	1900	1870	1900
Adj Flow Rate, veh/h	22	282	0	245	644	0	34	206	184	115	147	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	0	3	2	7	1	0	0	2	0
Cap, veh/h	393	1463		631	1704		361	229	205	205	477	45
Arrive On Green	0.02	0.41	0.00	0.09	0.48	0.00	0.03	0.25	0.25	0.06	0.28	0.28
Sat Flow, veh/h	1810	3554	1572	1810	3526	1585	1711	918	820	1810	1681	160
Grp Volume(v), veh/h	22	282	0	245	644	0	34	0	390	115	0	161
Grp Sat Flow(s),veh/h/ln	1810	1777	1572	1810	1763	1585	1711	0	1738	1810	0	1842
Q Serve(g_s), s	0.8	6.1	0.0	9.0	13.9	0.0	1.8	0.0	26.1	5.6	0.0	8.2
Cycle Q Clear(g_c), s	0.8	6.1	0.0	9.0	13.9	0.0	1.8	0.0	26.1	5.6	0.0	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.09
Lane Grp Cap(c), veh/h	393	1463		631	1704		361	0	434	205	0	522
V/C Ratio(X)	0.06	0.19		0.39	0.38		0.09	0.00	0.90	0.56	0.00	0.31
Avail Cap(c_a), veh/h	497	1463		681	1704		448	0	615	236	0	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	22.6	0.0	16.2	19.6	0.0	32.0	0.0	43.6	33.3	0.0	33.8
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.4	0.6	0.0	0.1	0.0	12.4	2.4	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	2.5	0.0	3.4	5.4	0.0	0.7	0.0	12.3	2.5	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	22.9	0.0	16.6	20.2	0.0	32.1	0.0	55.9	35.7	0.0	34.1
LnGrp LOS	B	C		B	C		C	A	E	D	A	C
Approach Vol, veh/h		304			889			424			276	
Approach Delay, s/veh		22.6			19.2			54.0			34.7	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	63.5	8.9	39.5	16.7	54.9	12.9	35.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	36.5	9.5	42.5	14.5	31.5	9.5	42.5
Max Q Clear Time (g_c+I1), s	2.8	15.9	3.8	10.2	11.0	8.1	7.6	28.1
Green Ext Time (p_c), s	0.0	6.8	0.0	0.8	0.2	2.8	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

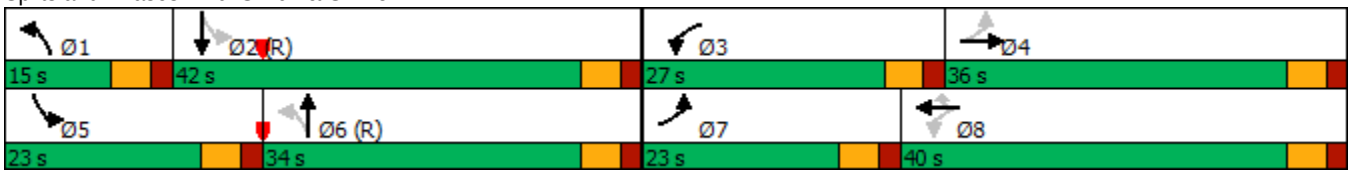
Future “No-Build” Intersection Analysis with Improvements

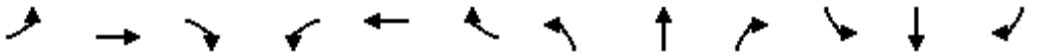
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	215	260	41	160	57	19	305	240	522
Future Volume (vph)	215	260	41	160	57	19	305	240	522
Lane Group Flow (vph)	229	304	44	170	61	20	361	255	737
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8		1	6	5	2
Permitted Phases	4		8		8	6		2	
Detector Phase	7	4	3	8	8	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	30.5	15.0	28.5	15.0	28.5
Total Split (s)	23.0	36.0	27.0	40.0	40.0	15.0	34.0	23.0	42.0
Total Split (%)	19.2%	30.0%	22.5%	33.3%	33.3%	12.5%	28.3%	19.2%	35.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.63	0.73	0.20	0.69	0.17	0.08	0.50	0.49	0.78
Control Delay	37.8	52.4	27.8	61.4	1.0	15.8	32.7	17.6	32.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.8	52.4	27.8	61.4	1.0	15.8	32.7	17.6	32.1
Queue Length 50th (ft)	135	220	23	127	0	6	204	94	393
Queue Length 95th (ft)	183	301	45	186	0	21	#373	170	#860
Internal Link Dist (ft)		3937		1310			3134		1962
Turn Bay Length (ft)	245		205		250	195		190	
Base Capacity (vph)	371	446	388	470	534	286	719	551	945
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.68	0.11	0.36	0.11	0.07	0.50	0.46	0.78

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	260	25	41	160	57	19	305	35	240	522	171
Future Volume (veh/h)	215	260	25	41	160	57	19	305	35	240	522	171
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1737	1900	1633	1663	1707	1900	1826	1811	1870	1856	1811
Adj Flow Rate, veh/h	229	277	27	44	170	61	20	324	0	255	555	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	11	0	18	16	13	0	5	6	2	3	6
Cap, veh/h	310	346	34	161	206	179	397	862		599	1006	
Arrive On Green	0.13	0.22	0.22	0.03	0.12	0.12	0.02	0.47	0.00	0.09	0.54	0.00
Sat Flow, veh/h	1711	1558	152	1555	1663	1447	1810	1826	0	1781	1856	0
Grp Volume(v), veh/h	229	0	304	44	170	61	20	324	0	255	555	0
Grp Sat Flow(s),veh/h/ln	1711	0	1710	1555	1663	1447	1810	1826	0	1781	1856	0
Q Serve(g_s), s	13.5	0.0	20.2	2.9	12.0	4.6	0.7	13.7	0.0	8.4	23.4	0.0
Cycle Q Clear(g_c), s	13.5	0.0	20.2	2.9	12.0	4.6	0.7	13.7	0.0	8.4	23.4	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	310	0	380	161	206	179	397	862		599	1006	
V/C Ratio(X)	0.74	0.00	0.80	0.27	0.83	0.34	0.05	0.38		0.43	0.55	
Avail Cap(c_a), veh/h	336	0	435	389	478	416	504	862		698	1006	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	0.0	44.2	44.3	51.3	48.1	16.6	20.3	0.0	13.8	17.9	0.0
Incr Delay (d2), s/veh	7.8	0.0	9.1	0.9	8.1	1.1	0.1	1.3	0.0	0.5	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	9.1	1.1	5.2	1.7	0.3	5.7	0.0	3.1	9.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	0.0	53.3	45.2	59.4	49.2	16.6	21.6	0.0	14.2	20.1	0.0
LnGrp LOS	D	A	D	D	E	D	B	C		B	C	
Approach Vol, veh/h		533			275			344			810	
Approach Delay, s/veh		50.0			54.8			21.3			18.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	70.6	9.4	32.2	16.3	62.2	21.1	20.4
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	36.5	21.5	30.5	17.5	28.5	17.5	34.5
Max Q Clear Time (g_c+I1), s	2.7	25.4	4.9	22.2	10.4	15.7	15.5	14.0
Green Ext Time (p_c), s	0.0	4.2	0.1	0.9	0.4	2.4	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

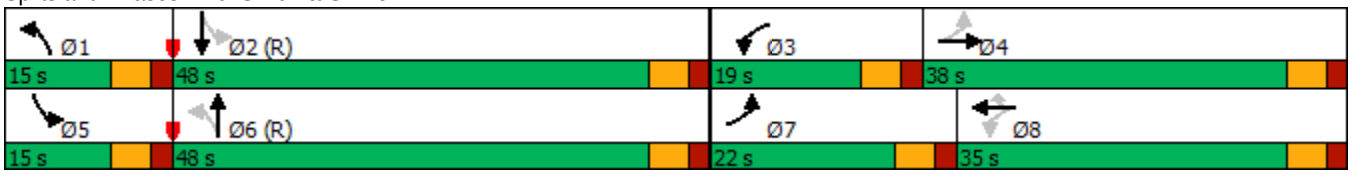
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

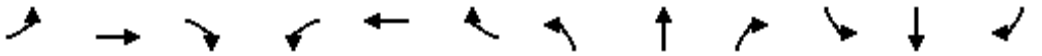
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	245	164	60	303	196	11	649	65	388
Future Volume (vph)	245	164	60	303	196	11	649	65	388
Lane Group Flow (vph)	250	174	61	309	200	11	692	66	648
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8		1	6	5	2
Permitted Phases	4		8		8	6		2	
Detector Phase	7	4	3	8	8	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	30.5	15.0	28.5	15.0	28.5
Total Split (s)	22.0	38.0	19.0	35.0	35.0	15.0	48.0	15.0	48.0
Total Split (%)	18.3%	31.7%	15.8%	29.2%	29.2%	12.5%	40.0%	12.5%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.76	0.38	0.18	0.82	0.41	0.04	0.88	0.38	0.73
Control Delay	41.6	36.6	23.8	62.9	7.6	16.7	48.3	22.3	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	36.6	23.8	62.9	7.6	16.7	48.3	22.3	30.5
Queue Length 50th (ft)	136	108	29	229	0	4	508	25	357
Queue Length 95th (ft)	#199	173	55	320	59	15	#830	53	#713
Internal Link Dist (ft)		3937		1310			3134		1962
Turn Bay Length (ft)	245		205		250	195		190	
Base Capacity (vph)	331	455	411	449	547	298	782	197	886
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.38	0.15	0.69	0.37	0.04	0.88	0.34	0.73

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	164	7	60	303	196	11	649	29	65	388	247
Future Volume (veh/h)	245	164	7	60	303	196	11	649	29	65	388	247
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1559	1900	1737	1841	1900	1900	1870	1352	1826	1870	1841
Adj Flow Rate, veh/h	250	167	7	61	309	200	11	662	0	66	396	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	23	0	11	4	0	0	2	37	5	2	4
Cap, veh/h	308	417	17	340	352	308	429	858		247	903	
Arrive On Green	0.13	0.28	0.28	0.04	0.19	0.19	0.01	0.46	0.00	0.04	0.48	0.00
Sat Flow, veh/h	1725	1486	62	1654	1841	1610	1810	1870	0	1739	1870	0
Grp Volume(v), veh/h	250	0	174	61	309	200	11	662	0	66	396	0
Grp Sat Flow(s),veh/h/ln	1725	0	1548	1654	1841	1610	1810	1870	0	1739	1870	0
Q Serve(g_s), s	13.5	0.0	10.9	3.5	19.6	13.8	0.4	35.6	0.0	2.4	16.7	0.0
Cycle Q Clear(g_c), s	13.5	0.0	10.9	3.5	19.6	13.8	0.4	35.6	0.0	2.4	16.7	0.0
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	308	0	434	340	352	308	429	858		247	903	
V/C Ratio(X)	0.81	0.00	0.40	0.18	0.88	0.65	0.03	0.77		0.27	0.44	
Avail Cap(c_a), veh/h	322	0	434	459	453	396	549	858		320	903	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.2	0.0	35.0	36.8	47.1	44.8	17.7	27.2	0.0	21.6	20.4	0.0
Incr Delay (d2), s/veh	14.1	0.0	0.6	0.3	14.5	2.4	0.0	6.7	0.0	0.6	1.5	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	6.5	0.0	4.0	1.4	9.9	5.4	0.2	16.2	0.0	0.9	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	0.0	35.6	37.0	61.7	47.2	17.7	33.9	0.0	22.2	21.9	0.0
LnGrp LOS	D	A	D	D	E	D	B	C		C	C	
Approach Vol, veh/h		424			570			673			462	
Approach Delay, s/veh		42.5			53.9			33.6			21.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	63.5	10.4	39.2	9.9	60.5	21.0	28.5
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	42.5	13.5	32.5	9.5	42.5	16.5	29.5
Max Q Clear Time (g_c+I1), s	2.4	18.7	5.5	12.9	4.4	37.6	15.5	21.6
Green Ext Time (p_c), s	0.0	4.2	0.1	0.7	0.0	2.7	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

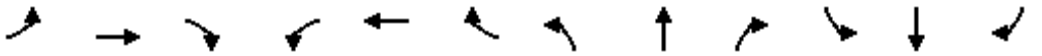
Future “Build” Intersections Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	10	84	192	10	65	149	1051	127	67	1112	5
Future Volume (vph)	4	10	84	192	10	65	149	1051	127	67	1112	5
Lane Group Flow (vph)	4	10	87	198	10	67	154	1084	131	69	1146	5
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8			6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	6	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	28.5	28.5	28.5	15.0	32.5	32.5
Total Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	72.5	72.5	72.5	15.0	87.5	87.5
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	60.4%	60.4%	60.4%	12.5%	72.9%	72.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.02	0.03	0.25	0.80	0.03	0.20	1.02	0.48	0.12	0.20	0.84	0.01
Control Delay	37.5	37.8	9.7	68.9	37.8	9.0	106.8	13.3	2.2	4.3	11.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	37.5	37.8	9.7	68.9	37.8	9.0	106.8	13.3	2.2	4.3	12.0	0.0
Queue Length 50th (ft)	3	6	0	147	6	0	~131	226	0	7	148	0
Queue Length 95th (ft)	12	21	42	224	21	34	#176	323	27	m14	m277	m0
Internal Link Dist (ft)		574			335			1022			938	
Turn Bay Length (ft)	75		175	135		180	270		205	315		290
Base Capacity (vph)	256	427	416	314	427	412	151	2260	1057	380	1359	848
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	21	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.21	0.63	0.02	0.16	1.02	0.48	0.12	0.18	0.86	0.01

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 7 (6%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: SR 92 & Thompson Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	10	84	192	10	65	149	1051	127	67	1112	5
Future Volume (veh/h)	4	10	84	192	10	65	149	1051	127	67	1112	5
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1530	1900	1841	1870	1900	1870	1885	1856	1856	1870	1870	1307
Adj Flow Rate, veh/h	4	10	0	198	10	0	154	1084	0	69	1146	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	25	0	4	2	0	2	1	3	3	2	2	40
Cap, veh/h	241	308		282	308		388	2337		394	1396	
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.00	0.66	0.66	0.00	0.07	1.00	0.00
Sat Flow, veh/h	1149	1900	1560	1405	1900	1585	495	3526	1572	1781	1870	1108
Grp Volume(v), veh/h	4	10	0	198	10	0	154	1084	0	69	1146	0
Grp Sat Flow(s),veh/h/ln	1149	1900	1560	1405	1900	1585	495	1763	1572	1781	1870	1108
Q Serve(g_s), s	0.4	0.5	0.0	16.6	0.5	0.0	18.3	18.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.5	0.0	17.1	0.5	0.0	18.3	18.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	308		282	308		388	2337		394	1396	
V/C Ratio(X)	0.02	0.03		0.70	0.03		0.40	0.46		0.18	0.82	
Avail Cap(c_a), veh/h	313	428		370	428		388	2337		468	1396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.45	0.45	0.00
Uniform Delay (d), s/veh	42.7	42.3	0.0	49.6	42.3	0.0	9.9	9.8	0.0	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.0	0.0	0.0	3.0	0.7	0.0	0.1	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	6.1	0.3	0.0	2.0	6.2	0.0	0.4	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	42.4	0.0	53.5	42.4	0.0	12.9	10.5	0.0	6.7	2.6	0.0
LnGrp LOS	D	D		D	D		B	B		A	A	
Approach Vol, veh/h		14			208			1238			1215	
Approach Delay, s/veh		42.5			53.0			10.8			2.8	
Approach LOS		D			D			B			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		95.0		25.0	10.0	85.0		25.0				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		82.0		27.0	9.5	67.0		27.0				
Max Q Clear Time (g_c+I1), s		2.0		2.9	3.4	20.3		19.1				
Green Ext Time (p_c), s		35.3		0.0	0.1	24.0		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		10.6
HCM 6th LOS		B

Notes

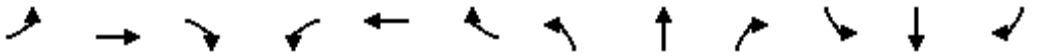
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	32	324	73	118	71	350	600	78	66	786	155
Future Volume (vph)	114	32	324	73	118	71	350	600	78	66	786	155
Lane Group Flow (vph)	0	154	341	0	201	75	368	632	82	69	827	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		1	6			2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	30.5	30.5	15.0	28.5	28.5	28.5	28.5	28.5
Total Split (s)	31.5	31.5	31.5	31.5	31.5	31.5	26.0	88.5	88.5	62.5	62.5	62.5
Total Split (%)	26.3%	26.3%	26.3%	26.3%	26.3%	26.3%	21.7%	73.8%	73.8%	52.1%	52.1%	52.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio		0.93	0.58		0.81	0.20	0.93	0.49	0.07	0.18	0.93	0.19
Control Delay		100.3	8.5		71.1	10.0	79.1	8.9	1.3	19.6	47.7	3.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		100.3	8.5		71.1	10.0	79.1	8.9	1.3	19.6	47.7	3.2
Queue Length 50th (ft)		114	0		146	0	~272	145	0	30	594	0
Queue Length 95th (ft)		#233	78		#252	40	#459	186	12	61	#869	36
Internal Link Dist (ft)		1001			314			938			742	
Turn Bay Length (ft)			290			230	280			290		350
Base Capacity (vph)		188	617		279	408	396	1297	1181	389	889	862
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.82	0.55		0.72	0.18	0.93	0.49	0.07	0.18	0.93	0.19

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: SR 92 & Hall Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	32	324	73	118	71	350	600	78	66	786	155
Future Volume (veh/h)	114	32	324	73	118	71	350	600	78	66	786	155
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1885	1900	1870	1826	1900	1900	1856	1900
Adj Flow Rate, veh/h	120	34	0	77	124	0	368	632	0	69	827	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	1	0	2	5	0	0	3	0
Cap, veh/h	192	39		138	177		431	1366		539	1100	
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.00	0.22	1.00	0.00	0.59	0.59	0.00
Sat Flow, veh/h	867	246	1610	602	1107	1610	1781	1826	1610	807	1856	1610
Grp Volume(v), veh/h	154	0	0	201	0	0	368	632	0	69	827	0
Grp Sat Flow(s),veh/h/ln	1113	0	1610	1709	0	1610	1781	1826	1610	807	1856	1610
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.0	4.6	39.3	0.0
Cycle Q Clear(g_c), s	16.9	0.0	0.0	13.3	0.0	0.0	10.4	0.0	0.0	4.6	39.3	0.0
Prop In Lane	0.78		1.00	0.38		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	0		315	0		431	1366		539	1100	
V/C Ratio(X)	0.66	0.00		0.64	0.00		0.85	0.46		0.13	0.75	
Avail Cap(c_a), veh/h	310	0		409	0		540	1366		539	1100	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.89	0.89	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.9	0.0	0.0	47.8	0.0	0.0	17.4	0.0	0.0	10.9	17.9	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	2.1	0.0	0.0	9.5	1.0	0.0	0.5	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	5.9	0.0	0.0	6.1	0.4	0.0	0.8	16.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	0.0	0.0	50.0	0.0	0.0	26.9	1.0	0.0	11.4	22.7	0.0
LnGrp LOS	D	A		D	A		C	A		B	C	
Approach Vol, veh/h		154			201			1000			896	
Approach Delay, s/veh		53.1			50.0			10.5			21.8	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	18.6	76.6		24.7		95.3		24.7				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	20.5	57.0		26.0		83.0		26.0				
Max Q Clear Time (g_c+I1), s	12.4	41.3		18.9		2.0		15.3				
Green Ext Time (p_c), s	0.7	9.0		0.4		10.2		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	4	89	775	1150
Demand Flow Rate, veh/h	4	89	802	1181
Vehicles Circulating, veh/h	1189	717	70	82
Vehicles Exiting, veh/h	74	155	1123	724
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.1	5.8	5.7	7.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	4	89	377	425	555	626
Cap Entry Lane, veh/h	517	772	1266	1338	1252	1324
Entry HV Adj Factor	1.000	1.000	0.966	0.966	0.974	0.974
Flow Entry, veh/h	4	89	364	411	540	609
Cap Entry, veh/h	517	772	1223	1293	1219	1289
V/C Ratio	0.008	0.115	0.298	0.318	0.443	0.473
Control Delay, s/veh	7.1	5.8	5.7	5.7	7.5	7.6
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	2	3

Intersection	
Intersection Delay, s/veh	6.4
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	282	698	820
Demand Flow Rate, veh/h	282	724	852
Vehicles Circulating, veh/h	445	17	266
Vehicles Exiting, veh/h	296	1101	461
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.7	5.0	7.5
Approach LOS	A	A	A

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	282	340	384	400	452
Cap Entry Lane, veh/h	973	1329	1400	1057	1133
Entry HV Adj Factor	1.000	0.965	0.963	0.963	0.961
Flow Entry, veh/h	282	328	370	385	435
Cap Entry, veh/h	973	1282	1348	1018	1089
V/C Ratio	0.290	0.256	0.274	0.378	0.399
Control Delay, s/veh	6.7	5.1	5.0	7.6	7.5
LOS	A	A	A	A	A
95th %tile Queue, veh	1	1	1	2	2

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	275	160	451	679
Demand Flow Rate, veh/h	276	160	470	708
Vehicles Circulating, veh/h	711	505	198	201
Vehicles Exiting, veh/h	152	132	789	464
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	5.0	5.4	8.1
Approach LOS	A	A	A	A

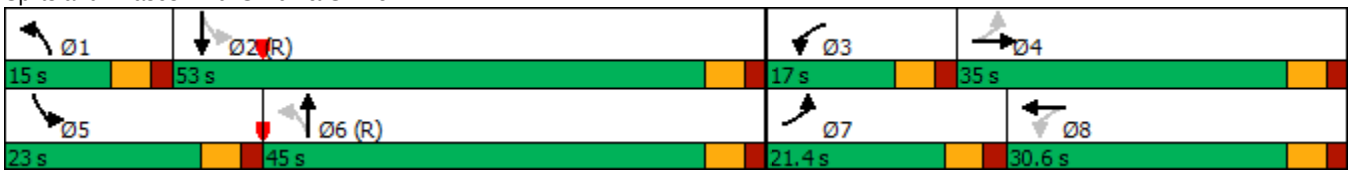
Lane	Left	Right	Left	Right	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	L	TR	L	TR	L	TR	R	L	TR	R
Assumed Moves	L	TR	L	TR	L	TR	R	L	TR	R
RT Channelized							Yield			Yield
Lane Util	0.239	0.761	0.306	0.694	0.191	0.809		0.092	0.908	
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.535		2.535	2.535	
Critical Headway, s	4.544	4.544	4.544	4.544	4.544	4.544	31	4.544	4.544	46
Entry Flow, veh/h	66	210	49	111	84	355	1206	61	601	1182
Cap Entry Lane, veh/h	744	744	897	897	1186	1186	1.000	1183	1183	1.000
Entry HV Adj Factor	1.000	0.993	1.000	1.000	0.976	0.952	31	1.000	0.952	46
Flow Entry, veh/h	66	209	49	111	82	338	1206	61	572	1182
Cap Entry, veh/h	744	739	897	897	1158	1129	0.026	1183	1126	0.039
V/C Ratio	0.089	0.282	0.055	0.124	0.071	0.299	3.2	0.052	0.508	3.4
Control Delay, s/veh	5.8	8.2	4.5	5.2	3.7	6.0	A	3.5	9.0	A
LOS	A	A	A	A	A	A	0	A	A	0
95th %tile Queue, veh	0	1	0	0	0	1		0	3	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	266	271	43	163	19	339	240	533
Future Volume (vph)	266	271	43	163	19	339	240	533
Lane Group Flow (vph)	283	315	46	234	20	406	255	767
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	5.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	15.0	28.5	15.0	28.5
Total Split (s)	21.4	35.0	17.0	30.6	15.0	45.0	23.0	53.0
Total Split (%)	17.8%	29.2%	14.2%	25.5%	12.5%	37.5%	19.2%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.84	0.71	0.20	0.82	0.10	0.58	0.56	0.84
Control Delay	53.0	49.8	27.1	66.3	15.9	34.4	19.8	36.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	49.8	27.1	66.3	15.9	34.4	19.8	36.6
Queue Length 50th (ft)	167	222	23	165	7	247	100	445
Queue Length 95th (ft)	#239	327	48	251	20	385	161	#873
Internal Link Dist (ft)		3937		1310		3134		1962
Turn Bay Length (ft)	245		205		195		190	
Base Capacity (vph)	336	451	276	341	242	698	489	912
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.70	0.17	0.69	0.08	0.58	0.52	0.84

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	271	25	43	163	57	19	339	42	240	533	188
Future Volume (veh/h)	266	271	25	43	163	57	19	339	42	240	533	188
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1737	1900	1633	1663	1707	1900	1826	1811	1870	1856	1811
Adj Flow Rate, veh/h	283	288	27	46	173	61	20	361	0	255	567	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	11	0	18	16	13	0	5	6	2	3	6
Cap, veh/h	310	415	39	203	194	68	335	770		518	925	
Arrive On Green	0.13	0.27	0.27	0.03	0.17	0.17	0.02	0.42	0.00	0.10	0.50	0.00
Sat Flow, veh/h	1711	1564	147	1555	1174	414	1810	1826	0	1781	1856	0
Grp Volume(v), veh/h	283	0	315	46	0	234	20	361	0	255	567	0
Grp Sat Flow(s),veh/h/ln	1711	0	1711	1555	0	1588	1810	1826	0	1781	1856	0
Q Serve(g_s), s	15.9	0.0	19.9	2.9	0.0	17.3	0.7	17.1	0.0	9.3	26.5	0.0
Cycle Q Clear(g_c), s	15.9	0.0	19.9	2.9	0.0	17.3	0.7	17.1	0.0	9.3	26.5	0.0
Prop In Lane	1.00		0.09	1.00		0.26	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	310	0	453	203	0	262	335	770		518	925	
V/C Ratio(X)	0.91	0.00	0.69	0.23	0.00	0.89	0.06	0.47		0.49	0.61	
Avail Cap(c_a), veh/h	310	0	453	301	0	332	442	770		605	925	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.0	0.0	39.7	40.1	0.0	49.0	20.2	25.0	0.0	17.1	21.7	0.0
Incr Delay (d2), s/veh	30.0	0.0	4.6	0.6	0.0	21.1	0.1	2.0	0.0	0.7	3.0	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	9.0	0.0	8.5	1.1	0.0	8.1	0.3	7.4	0.0	3.6	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.0	0.0	44.3	40.6	0.0	70.2	20.2	27.1	0.0	17.9	24.7	0.0
LnGrp LOS	E	A	D	D	A	E	C	C		B	C	
Approach Vol, veh/h		598			280			381			822	
Approach Delay, s/veh		54.6			65.3			26.7			22.6	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	65.3	9.4	37.3	17.2	56.1	21.4	25.3
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	47.5	11.5	29.5	17.5	39.5	15.9	25.1
Max Q Clear Time (g_c+I1), s	2.7	28.5	4.9	21.9	11.3	19.1	17.9	19.3
Green Ext Time (p_c), s	0.0	5.9	0.0	0.9	0.4	3.5	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	1	2
Conflicting Circle Lanes	1	1	2
Adj Approach Flow, veh/h	621	733	718
Demand Flow Rate, veh/h	661	777	727
Vehicles Circulating, veh/h	380	94	569
Vehicles Exiting, veh/h	94	1202	472
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.3	2.9	9.8
Approach LOS	A	A	A

Lane	Left	Right	Left	Bypass	Left	Right
Designated Moves	L	LTR	T	R	LT	TR
Assumed Moves	L	LTR	T	R	LT	TR
RT Channelized				Free		
Lane Util	0.530	0.470	1.000		0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609		2.667	2.535
Critical Headway, s	4.544	4.544	4.976	397	4.645	4.328
Entry Flow, veh/h	350	311	380	2052	342	385
Cap Entry Lane, veh/h	1005	1005	1254	0.926	800	875
Entry HV Adj Factor	0.940	0.938	0.962	368	0.986	0.988
Flow Entry, veh/h	329	292	365	1900	337	380
Cap Entry, veh/h	945	943	1205	0.194	789	865
V/C Ratio	0.348	0.309	0.303	0.0	0.428	0.440
Control Delay, s/veh	7.6	7.1	5.8	A	10.1	9.6
LOS	A	A	A	1	B	A
95th %tile Queue, veh	2	1	1		2	2

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	12	2	10	4	4	1	40	21	5	42	1
Future Vol, veh/h	3	12	2	10	4	4	1	40	21	5	42	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	-	-	175
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	81	92	81	92	81	81	81	81	92
Heavy Vehicles, %	2	2	2	0	2	0	2	8	10	0	0	2
Mvmt Flow	3	13	2	12	4	5	1	49	26	6	52	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	133	141	52	136	129	62	53	0	0	75	0	0
Stage 1	64	64	-	64	64	-	-	-	-	-	-	-
Stage 2	69	77	-	72	65	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	839	750	1016	840	762	1009	1553	-	-	1537	-	-
Stage 1	947	842	-	952	842	-	-	-	-	-	-	-
Stage 2	941	831	-	943	841	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	828	746	1016	824	758	1009	1553	-	-	1537	-	-
Mov Cap-2 Maneuver	828	746	-	824	758	-	-	-	-	-	-	-
Stage 1	946	839	-	951	841	-	-	-	-	-	-	-
Stage 2	931	830	-	923	838	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.4	0.1	0.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1553	-	-	784	845	1537	-	-
HCM Lane V/C Ratio	0.001	-	-	0.024	0.026	0.004	-	-
HCM Control Delay (s)	7.3	-	-	9.7	9.4	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	171	41	30	80	17	49
Future Vol, veh/h	171	41	30	80	17	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	23	0	0	0	2
Mvmt Flow	222	53	39	104	22	64

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	275	0	431	249
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	182	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1300	-	585	790
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1300	-	566	790
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	717	-	-	1300	-
HCM Lane V/C Ratio	0.12	-	-	0.03	-
HCM Control Delay (s)	10.7	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	30	15	46	87	1
Future Vol, veh/h	3	30	15	46	87	1
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	33	0	0	3	2	0
Mvmt Flow	4	39	20	61	114	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	216	115	115	0	-	0
Stage 1	115	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.73	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	708	943	1487	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	698	943	1487	-	-	-
Mov Cap-2 Maneuver	698	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1487	-	914	-	-
HCM Lane V/C Ratio	0.013	-	0.048	-	-
HCM Control Delay (s)	7.5	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	157	109	62	116	12
Future Vol, veh/h	5	157	109	62	116	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	2	4	2	0	0
Mvmt Flow	6	185	128	73	136	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	201	0	-	0	362	165
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1383	-	-	-	641	885
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1383	-	-	-	638	885
Mov Cap-2 Maneuver	-	-	-	-	638	-
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	841	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.1
HCM LOS			B

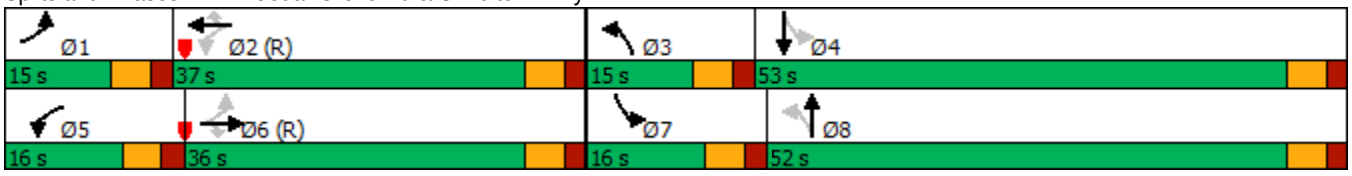
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1383	-	-	-	655
HCM Lane V/C Ratio	0.004	-	-	-	0.23
HCM Control Delay (s)	7.6	0	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.9

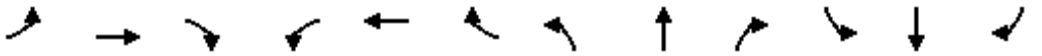
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	38	677	35	135	315	96	15	94	191	161
Future Volume (vph)	38	677	35	135	315	96	15	94	191	161
Lane Group Flow (vph)	44	778	40	155	362	110	17	428	220	237
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	1	6		5	2		3	8	7	4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	3	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	6.0	5.0	6.0
Minimum Split (s)	15.0	31.5	31.5	15.0	28.5	28.5	15.0	45.5	15.0	41.5
Total Split (s)	15.0	36.0	36.0	16.0	37.0	37.0	15.0	52.0	16.0	53.0
Total Split (%)	12.5%	30.0%	30.0%	13.3%	30.8%	30.8%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.09	0.55	0.06	0.47	0.23	0.14	0.05	0.85	0.98	0.39
Control Delay	17.3	32.3	0.1	20.8	23.5	4.3	20.8	44.1	85.3	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	32.3	0.1	20.8	23.5	4.3	20.8	44.1	85.3	30.8
Queue Length 50th (ft)	15	240	0	58	91	0	8	219	122	123
Queue Length 95th (ft)	40	363	0	114	148	30	19	284	#224	186
Internal Link Dist (ft)		2109			2773			901		3276
Turn Bay Length (ft)	295		150	320		160	65		120	
Base Capacity (vph)	512	1407	716	343	1584	790	416	732	224	730
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.55	0.06	0.45	0.23	0.14	0.04	0.58	0.98	0.32

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Cedar Grove Rd & S. Fulton Pkwy





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	677	35	135	315	96	15	94	278	191	161	45
Future Volume (veh/h)	38	677	35	135	315	96	15	94	278	191	161	45
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1900	1885	1856	1885	1900	1856	1885	1885	1885	1900
Adj Flow Rate, veh/h	44	778	0	155	362	0	17	108	320	220	185	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	2	0	1	3	1	0	3	1	1	1	0
Cap, veh/h	450	1324		321	1444		395	119	352	251	505	142
Arrive On Green	0.03	0.37	0.00	0.07	0.41	0.00	0.02	0.29	0.29	0.09	0.36	0.36
Sat Flow, veh/h	1711	3554	1610	1795	3526	1598	1810	413	1223	1795	1416	398
Grp Volume(v), veh/h	44	778	0	155	362	0	17	0	428	220	0	237
Grp Sat Flow(s),veh/h/ln	1711	1777	1610	1795	1763	1598	1810	0	1635	1795	0	1814
Q Serve(g_s), s	1.9	21.1	0.0	6.2	8.1	0.0	0.8	0.0	30.3	10.2	0.0	11.6
Cycle Q Clear(g_c), s	1.9	21.1	0.0	6.2	8.1	0.0	0.8	0.0	30.3	10.2	0.0	11.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		0.22
Lane Grp Cap(c), veh/h	450	1324		321	1444		395	0	470	251	0	647
V/C Ratio(X)	0.10	0.59		0.48	0.25		0.04	0.00	0.91	0.88	0.00	0.37
Avail Cap(c_a), veh/h	530	1324		355	1444		506	0	634	251	0	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	30.2	0.0	22.5	23.3	0.0	29.3	0.0	41.3	30.5	0.0	28.5
Incr Delay (d2), s/veh	0.1	1.9	0.0	1.1	0.4	0.0	0.0	0.0	14.1	27.5	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	0.7	8.8	0.0	2.5	3.2	0.0	0.3	0.0	13.5	6.1	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	32.1	0.0	23.6	23.7	0.0	29.3	0.0	55.4	58.0	0.0	28.9
LnGrp LOS	C	C		C	C		C	A	E	E	A	C
Approach Vol, veh/h		822			517			445			457	
Approach Delay, s/veh		31.6			23.7			54.4			42.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	54.6	7.7	48.3	13.8	50.2	16.0	40.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	31.5	9.5	47.5	10.5	30.5	10.5	46.5
Max Q Clear Time (g_c+I1), s	3.9	10.1	2.8	13.6	8.2	23.1	12.2	32.3
Green Ext Time (p_c), s	0.0	3.6	0.0	1.3	0.1	4.1	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	62	422	16	20	395
Future Vol, veh/h	49	62	422	16	20	395
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	-	-	250	310	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	11	2	2	13
Mvmt Flow	53	67	459	17	22	429

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	932	459	0	0	476	0
Stage 1	459	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	296	602	-	-	1086	-
Stage 1	636	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	290	602	-	-	1086	-
Mov Cap-2 Maneuver	290	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	614	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.5	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	1086	-
HCM Lane V/C Ratio	-	-	0.296	0.02	-
HCM Control Delay (s)	-	-	17.5	8.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	49	43	54	163	3
Future Vol, veh/h	1	49	43	54	163	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	175	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	53	47	59	177	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	106	0	-	0	102	47
Stage 1	-	-	-	-	47	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1485	-	-	-	896	1022
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	968	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1485	-	-	-	895	1022
Mov Cap-2 Maneuver	-	-	-	-	895	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	968	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1485	-	-	-	897
HCM Lane V/C Ratio	0.001	-	-	-	0.201
HCM Control Delay (s)	7.4	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	7	11	92	305	4	92	63	1281	109	138	932
Future Volume (vph)	7	11	92	305	4	92	63	1281	109	138	932
Lane Group Flow (vph)	8	12	100	332	4	100	68	1392	118	150	1013
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases		4			8			6		5	2
Permitted Phases	4		4	8		8	6		6	2	
Detector Phase	4	4	4	8	8	8	6	6	6	5	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	5.0	15.0
Minimum Split (s)	32.5	32.5	32.5	32.5	32.5	32.5	28.5	28.5	28.5	15.0	32.5
Total Split (s)	39.2	39.2	39.2	39.2	39.2	39.2	65.8	65.8	65.8	15.0	80.8
Total Split (%)	32.7%	32.7%	32.7%	32.7%	32.7%	32.7%	54.8%	54.8%	54.8%	12.5%	67.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lag	Lag	Lag	Lead	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	None	C-Min
v/c Ratio	0.02	0.02	0.22	0.90	0.01	0.20	0.54	0.75	0.13	0.67	0.84
Control Delay	31.6	31.6	7.5	71.0	31.2	7.3	40.3	25.9	5.5	34.8	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	31.6	7.5	71.0	31.2	7.3	40.3	25.9	5.5	34.8	20.5
Queue Length 50th (ft)	5	7	0	242	2	0	36	453	11	66	312
Queue Length 95th (ft)	17	22	42	#396	11	41	#110	549	42	m124	#564
Internal Link Dist (ft)		574			335			1022			938
Turn Bay Length (ft)	75		175	135		180	270		205	315	
Base Capacity (vph)	402	533	495	400	426	525	126	1861	890	235	1199
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	2
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.20	0.83	0.01	0.19	0.54	0.75	0.13	0.64	0.85

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 113 (94%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: SR 92 & Thompson Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	11	92	305	4	92	63	1281	109	138	932	0
Future Volume (veh/h)	7	11	92	305	4	92	63	1281	109	138	932	0
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1796	1900	1530	1900	1752	1856	1885	1900	1856	1900
Adj Flow Rate, veh/h	8	12	0	332	4	0	68	1392	0	150	1013	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	7	0	25	0	10	3	1	0	3	0
Cap, veh/h	420	481		414	387		350	1964		260	1216	
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.00	0.56	0.56	0.00	0.10	1.00	0.00
Sat Flow, veh/h	1435	1900	1522	1424	1530	1610	521	3526	1598	1810	1856	1610
Grp Volume(v), veh/h	8	12	0	332	4	0	68	1392	0	150	1013	0
Grp Sat Flow(s),veh/h/ln	1435	1900	1522	1424	1530	1610	521	1763	1598	1810	1856	1610
Q Serve(g_s), s	0.5	0.6	0.0	27.4	0.2	0.0	8.0	34.7	0.0	4.2	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.6	0.0	28.0	0.2	0.0	8.0	34.7	0.0	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	420	481		414	387		350	1964		260	1216	
V/C Ratio(X)	0.02	0.02		0.80	0.01		0.19	0.71		0.58	0.83	
Avail Cap(c_a), veh/h	460	534		453	430		350	1964		309	1216	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.66	0.66	0.00
Uniform Delay (d), s/veh	33.8	33.7	0.0	44.2	33.6	0.0	13.5	19.4	0.0	16.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.3	0.0	0.0	1.2	2.2	0.0	1.3	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	10.7	0.1	0.0	1.0	13.5	0.0	1.6	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	33.7	0.0	53.5	33.6	0.0	14.8	21.6	0.0	18.3	4.6	0.0
LnGrp LOS	C	C		D	C		B	C		B	A	
Approach Vol, veh/h		20			336			1460			1163	
Approach Delay, s/veh		33.8			53.3			21.3			6.4	
Approach LOS		C			D			C			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		84.1		35.9	11.8	72.4		35.9				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		75.3		33.7	9.5	60.3		33.7				
Max Q Clear Time (g_c+I1), s		2.0		2.7	6.2	36.7		30.0				
Green Ext Time (p_c), s		25.4		0.0	0.1	17.6		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			19.2									
HCM 6th LOS			B									

Notes

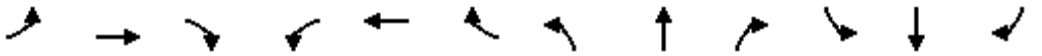
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	19	259	65	13	108	152	1152	48	54	760	57
Future Volume (vph)	125	19	259	65	13	108	152	1152	48	54	760	57
Lane Group Flow (vph)	0	160	288	0	86	120	169	1280	53	60	844	63
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		1	6			2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	30.5	30.5	15.0	28.5	28.5	28.5	28.5	28.5
Total Split (s)	31.5	31.5	31.5	31.5	31.5	31.5	15.0	88.5	88.5	73.5	73.5	73.5
Total Split (%)	26.3%	26.3%	26.3%	26.3%	26.3%	26.3%	12.5%	73.8%	73.8%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
v/c Ratio		0.75	0.59		0.55	0.35	0.48	0.93	0.04	0.81	0.73	0.06
Control Delay		68.6	11.7		58.4	15.4	14.5	29.9	0.1	90.1	21.3	2.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay		68.6	11.7		58.4	15.4	14.5	29.9	0.1	90.1	21.5	2.2
Queue Length 50th (ft)		119	13		62	17	16	534	0	33	422	0
Queue Length 95th (ft)		186	89		111	67	m48	#648	m0	#135	691	16
Internal Link Dist (ft)		1001			314			938			742	
Turn Bay Length (ft)			290			230	280			290		350
Base Capacity (vph)		285	560		209	423	368	1377	1216	74	1162	1044
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	4		0	0	0	0	0	0	29	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.56	0.52		0.41	0.28	0.46	0.93	0.04	0.81	0.74	0.06

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SR 92 & Hall Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	19	259	65	13	108	152	1152	48	54	760	57
Future Volume (veh/h)	125	19	259	65	13	108	152	1152	48	54	760	57
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1885	1856	1900	1900	1856	1900
Adj Flow Rate, veh/h	139	21	0	72	14	0	169	1280	0	60	844	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	1	3	0	0	3	0
Cap, veh/h	219	25		216	37		433	1463		366	1296	
Arrive On Green	0.12	0.12	0.00	0.12	0.12	0.00	0.09	1.00	0.00	0.70	0.70	0.00
Sat Flow, veh/h	1361	206	1610	1344	313	1610	1795	1856	1610	439	1856	1610
Grp Volume(v), veh/h	160	0	0	86	0	0	169	1280	0	60	844	0
Grp Sat Flow(s),veh/h/ln	1566	0	1610	1657	0	1610	1795	1856	1610	439	1856	1610
Q Serve(g_s), s	6.2	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	5.7	30.2	0.0
Cycle Q Clear(g_c), s	11.8	0.0	0.0	5.6	0.0	0.0	3.2	0.0	0.0	5.7	30.2	0.0
Prop In Lane	0.87		1.00	0.84		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	0		254	0		433	1463		366	1296	
V/C Ratio(X)	0.66	0.00		0.34	0.00		0.39	0.87		0.16	0.65	
Avail Cap(c_a), veh/h	386	0		396	0		496	1463		366	1296	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.64	0.64	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.5	0.0	0.0	48.9	0.0	0.0	9.1	0.0	0.0	6.3	10.0	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.0	0.8	0.0	0.0	0.4	5.0	0.0	1.0	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	2.5	0.0	0.0	1.2	2.1	0.0	0.5	11.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	0.0	0.0	49.7	0.0	0.0	9.5	5.0	0.0	7.3	12.6	0.0
LnGrp LOS	D	A		D	A		A	A		A	B	
Approach Vol, veh/h		160			86			1449			904	
Approach Delay, s/veh		54.5			49.7			5.6			12.2	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.8	89.3		19.9		100.1		19.9				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s	9.5	68.0		26.0		83.0		26.0				
Max Q Clear Time (g_c+I1), s	5.2	32.2		13.8		2.0		7.6				
Green Ext Time (p_c), s	0.2	15.7		0.5		47.0		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		12.4	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	5	101	1445	920
Demand Flow Rate, veh/h	5	101	1472	946
Vehicles Circulating, veh/h	991	1364	25	68
Vehicles Exiting, veh/h	23	133	971	1397
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.0	11.6	8.6	6.3
Approach LOS	A	B	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	5	101	692	780	445	501
Cap Entry Lane, veh/h	612	445	1319	1390	1268	1340
Entry HV Adj Factor	1.000	1.000	0.982	0.982	0.971	0.973
Flow Entry, veh/h	5	101	679	766	432	487
Cap Entry, veh/h	612	445	1295	1365	1231	1304
V/C Ratio	0.008	0.227	0.525	0.561	0.351	0.374
Control Delay, s/veh	6.0	11.6	8.4	8.8	6.3	6.3
LOS	A	B	A	A	A	A
95th %tile Queue, veh	0	1	3	4	2	2

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	208	1243	617
Demand Flow Rate, veh/h	211	1277	635
Vehicles Circulating, veh/h	896	19	200
Vehicles Exiting, veh/h	400	816	907
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.6	7.4	5.8
Approach LOS	A	A	A

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	211	600	677	298	337
Cap Entry Lane, veh/h	663	1326	1397	1123	1198
Entry HV Adj Factor	0.986	0.973	0.973	0.973	0.970
Flow Entry, veh/h	208	584	659	290	327
Cap Entry, veh/h	654	1291	1359	1093	1163
V/C Ratio	0.318	0.452	0.484	0.265	0.281
Control Delay, s/veh	9.6	7.3	7.5	5.8	5.7
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	3	1	1

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	185	204	858	489
Demand Flow Rate, veh/h	185	207	894	512
Vehicles Circulating, veh/h	530	902	128	265
Vehicles Exiting, veh/h	186	90	587	844
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	8.0	8.7	6.5
Approach LOS	A	A	A	A

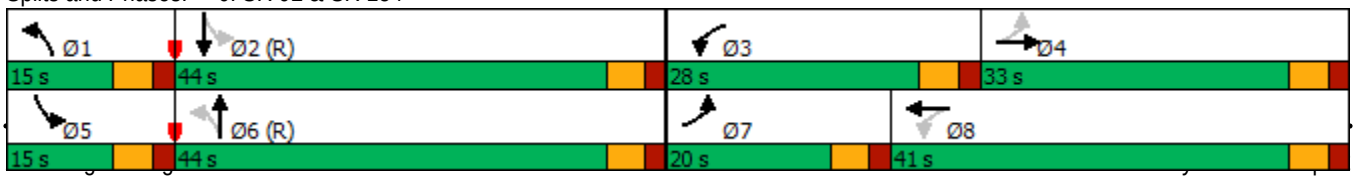
Lane	Left	Right	Left	Right	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	L	TR	L	TR	L	TR	R	L	TR	R
Assumed Moves	L	TR	L	TR	L	TR	R	L	TR	R
RT Channelized							Yield			Yield
Lane Util	0.205	0.795	0.382	0.618	0.154	0.846		0.089	0.911	
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.535		2.535	2.535	
Critical Headway, s	4.544	4.544	4.544	4.544	4.544	4.544	30	4.544	4.544	61
Entry Flow, veh/h	38	147	79	128	133	731	1259	40	411	1141
Cap Entry Lane, veh/h	877	877	625	625	1264	1264	0.962	1116	1116	1.000
Entry HV Adj Factor	1.000	1.000	0.987	0.988	1.000	0.952	29	1.000	0.943	61
Flow Entry, veh/h	38	147	78	126	133	696	1210	40	388	1141
Cap Entry, veh/h	877	877	617	617	1264	1204	0.024	1116	1053	0.053
V/C Ratio	0.043	0.168	0.126	0.205	0.105	0.578	3.2	0.036	0.368	3.6
Control Delay, s/veh	4.5	5.8	7.3	8.4	3.7	9.9	A	3.5	7.2	A
LOS	A	A	A	A	A	A	0	A	A	0
95th %tile Queue, veh	0	1	0	1	0	4		0	2	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	280	171	68	315	11	672	65	426
Future Volume (vph)	280	171	68	315	11	672	65	426
Lane Group Flow (vph)	286	181	69	521	11	721	66	745
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	5.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	15.0	28.5	15.0	28.5
Total Split (s)	20.0	33.0	28.0	41.0	15.0	44.0	15.0	44.0
Total Split (%)	16.7%	27.5%	23.3%	34.2%	12.5%	36.7%	12.5%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	1.09	0.32	0.16	0.97	0.07	1.12	0.38	0.99
Control Delay	113.7	30.5	19.7	73.2	19.9	111.2	25.8	63.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.7	30.5	19.7	73.2	19.9	111.2	25.8	63.2
Queue Length 50th (ft)	~201	102	29	382	5	~676	29	524
Queue Length 95th (ft)	#382	170	58	#610	16	#933	57	#931
Internal Link Dist (ft)		3937		1310		3134		1962
Turn Bay Length (ft)	245		205		195		190	
Base Capacity (vph)	263	567	607	535	206	643	193	755
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.32	0.11	0.97	0.05	1.12	0.34	0.99

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	171	7	68	315	196	11	672	34	65	426	304
Future Volume (veh/h)	280	171	7	68	315	196	11	672	34	65	426	304
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1559	1900	1737	1841	1900	1900	1870	1352	1826	1870	1841
Adj Flow Rate, veh/h	286	174	7	69	321	200	11	686	0	66	435	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	23	0	11	4	0	0	2	37	5	2	4
Cap, veh/h	268	558	22	456	314	196	278	679		124	724	
Arrive On Green	0.12	0.37	0.37	0.04	0.30	0.30	0.01	0.36	0.00	0.04	0.39	0.00
Sat Flow, veh/h	1725	1488	60	1654	1061	661	1810	1870	0	1739	1870	0
Grp Volume(v), veh/h	286	0	181	69	0	521	11	686	0	66	435	0
Grp Sat Flow(s),veh/h/ln	1725	0	1548	1654	0	1722	1810	1870	0	1739	1870	0
Q Serve(g_s), s	14.5	0.0	9.9	3.5	0.0	35.5	0.5	43.6	0.0	2.8	22.3	0.0
Cycle Q Clear(g_c), s	14.5	0.0	9.9	3.5	0.0	35.5	0.5	43.6	0.0	2.8	22.3	0.0
Prop In Lane	1.00		0.04	1.00		0.38	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	268	0	580	456	0	509	278	679		124	724	
V/C Ratio(X)	1.07	0.00	0.31	0.15	0.00	1.02	0.04	1.01		0.53	0.60	
Avail Cap(c_a), veh/h	268	0	580	697	0	509	398	679		198	724	
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.9	0.0	26.5	27.5	0.0	42.3	25.1	38.2	0.0	30.4	29.4	0.0
Incr Delay (d2), s/veh	73.3	0.0	0.3	0.2	0.0	45.8	0.1	37.2	0.0	3.5	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.0	3.5	1.3	0.0	20.6	0.2	25.6	0.0	1.2	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.3	0.0	26.9	27.6	0.0	88.1	25.2	75.4	0.0	33.8	33.0	0.0
LnGrp LOS	F	A	C	C	A	F	C	F		C	C	
Approach Vol, veh/h		467			590			697			501	
Approach Delay, s/veh		77.3			81.0			74.6			33.1	
Approach LOS		E			F			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	52.0	10.5	50.5	9.9	49.1	20.0	41.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	22.5	27.5	9.5	38.5	14.5	35.5
Max Q Clear Time (g_c+I1), s	2.5	24.3	5.5	11.9	4.8	45.6	16.5	37.5
Green Ext Time (p_c), s	0.0	3.7	0.1	0.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	67.6
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	2	1	2
Conflicting Circle Lanes	1	1	2
Adj Approach Flow, veh/h	637	1326	472
Demand Flow Rate, veh/h	658	1362	481
Vehicles Circulating, veh/h	783	69	527
Vehicles Exiting, veh/h	69	939	914
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	12.5	5.9	7.2
Approach LOS	B	A	A

Lane	Left	Right	Left	Bypass	Left	Right
Designated Moves	L	LTR	T	R	LT	TR
Assumed Moves	L	LTR	T	R	LT	TR
RT Channelized				Free		
Lane Util	0.530	0.470	1.000		0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609		2.667	2.535
Critical Headway, s	4.544	4.544	4.976	579	4.645	4.328
Entry Flow, veh/h	349	309	783	1995	226	255
Cap Entry Lane, veh/h	696	696	1286	0.952	831	907
Entry HV Adj Factor	0.967	0.969	0.990	551	0.981	0.981
Flow Entry, veh/h	338	299	775	1900	222	250
Cap Entry, veh/h	674	675	1273	0.290	816	890
V/C Ratio	0.501	0.444	0.609	0.0	0.272	0.281
Control Delay, s/veh	13.1	11.7	10.2	A	7.4	7.0
LOS	B	B	B	1	A	A
95th %tile Queue, veh	3	2	4		1	1

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	8	1	18	14	3	2	39	15	1	50	3
Future Vol, veh/h	2	8	1	18	14	3	2	39	15	1	50	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	-	-	175
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	92	93	92	93	93	93	93	92
Heavy Vehicles, %	2	2	2	17	2	0	2	0	0	0	7	2
Mvmt Flow	2	9	1	19	15	3	2	42	16	1	54	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	119	118	54	117	113	50	57	0	0	58	0	0
Stage 1	56	56	-	54	54	-	-	-	-	-	-	-
Stage 2	63	62	-	63	59	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.27	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.27	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.27	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.653	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	857	772	1013	825	777	1024	1547	-	-	1559	-	-
Stage 1	956	848	-	922	850	-	-	-	-	-	-	-
Stage 2	948	843	-	912	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	840	770	1013	816	775	1024	1547	-	-	1559	-	-
Mov Cap-2 Maneuver	840	770	-	816	775	-	-	-	-	-	-	-
Stage 1	955	847	-	921	849	-	-	-	-	-	-	-
Stage 2	927	842	-	901	845	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	9.6	0.3	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1547	-	-	800	813	1559	-	-
HCM Lane V/C Ratio	0.001	-	-	0.015	0.046	0.001	-	-
HCM Control Delay (s)	7.3	-	-	9.6	9.6	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	124	24	43	195	36	29
Future Vol, veh/h	124	24	43	195	36	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	135	26	47	212	39	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	161	0	454	148
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1418	-	568	904
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	751	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1418	-	546	904
Mov Cap-2 Maneuver	-	-	-	-	546	-
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	722	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	663	-	-	1418	-
HCM Lane V/C Ratio	0.107	-	-	0.033	-
HCM Control Delay (s)	11.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	33	76	53	2
Future Vol, veh/h	0	23	33	76	53	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	14	0	0	0	50
Mvmt Flow	0	26	37	85	60	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	220	61	62	0	-	0
Stage 1	61	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.4	6.34	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.426	2.2	-	-	-
Pot Cap-1 Maneuver	773	971	1554	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	754	971	1554	-	-	-
Mov Cap-2 Maneuver	754	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	875	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1554	-	971	-	-
HCM Lane V/C Ratio	0.024	-	0.027	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	145	190	124	85	8
Future Vol, veh/h	6	145	190	124	85	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	1	2	2	0
Mvmt Flow	7	158	207	135	92	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	342	0	-	0	447	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	172	-
Critical Hdwy	4.1	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1228	-	-	-	569	769
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	858	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1228	-	-	-	566	769
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	858	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	12.5
HCM LOS			B

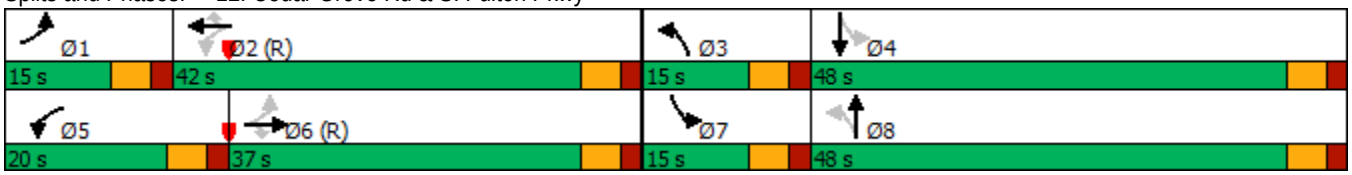
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1228	-	-	-	579
HCM Lane V/C Ratio	0.005	-	-	-	0.175
HCM Control Delay (s)	7.9	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.6

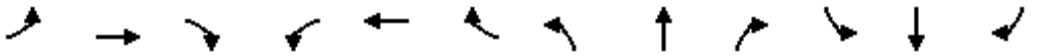
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	50	268	38	233	612	168	32	199	124	142
Future Volume (vph)	50	268	38	233	612	168	32	199	124	142
Lane Group Flow (vph)	53	282	40	245	644	177	34	393	131	182
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	1	6		5	2		3	8	7	4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	3	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	6.0	5.0	6.0
Minimum Split (s)	15.0	31.5	31.5	15.0	28.5	28.5	15.0	45.5	15.0	41.5
Total Split (s)	15.0	37.0	37.0	20.0	42.0	42.0	15.0	48.0	15.0	48.0
Total Split (%)	12.5%	30.8%	30.8%	16.7%	35.0%	35.0%	12.5%	40.0%	12.5%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.14	0.21	0.06	0.41	0.41	0.22	0.09	0.83	0.54	0.32
Control Delay	17.6	28.8	0.2	18.9	26.2	5.5	21.9	52.9	32.4	31.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.6	28.8	0.2	18.9	26.2	5.5	21.9	52.9	32.4	31.7
Queue Length 50th (ft)	19	78	0	99	182	4	17	261	67	107
Queue Length 95th (ft)	47	132	0	177	275	55	34	344	99	159
Internal Link Dist (ft)		2109			2773			901		3276
Turn Bay Length (ft)	295		150	320		160	65		120	
Base Capacity (vph)	408	1313	659	613	1555	795	420	649	243	650
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.21	0.06	0.40	0.41	0.22	0.08	0.61	0.54	0.28

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 12: Cedar Grove Rd & S. Fulton Pkwy





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	268	38	233	612	168	32	199	175	124	142	31
Future Volume (veh/h)	50	268	38	233	612	168	32	199	175	124	142	31
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1856	1900	1856	1870	1796	1885	1900	1900	1870	1900
Adj Flow Rate, veh/h	53	282	0	245	644	0	34	209	184	131	149	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	0	3	2	7	1	0	0	2	0
Cap, veh/h	396	1431		622	1631		353	232	205	216	432	96
Arrive On Green	0.03	0.40	0.00	0.09	0.46	0.00	0.03	0.25	0.25	0.07	0.29	0.29
Sat Flow, veh/h	1810	3554	1572	1810	3526	1585	1711	925	814	1810	1483	328
Grp Volume(v), veh/h	53	282	0	245	644	0	34	0	393	131	0	182
Grp Sat Flow(s),veh/h/ln	1810	1777	1572	1810	1763	1585	1711	0	1739	1810	0	1811
Q Serve(g_s), s	2.0	6.2	0.0	9.1	14.4	0.0	1.8	0.0	26.2	6.3	0.0	9.5
Cycle Q Clear(g_c), s	2.0	6.2	0.0	9.1	14.4	0.0	1.8	0.0	26.2	6.3	0.0	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.18
Lane Grp Cap(c), veh/h	396	1431		622	1631		353	0	437	216	0	528
V/C Ratio(X)	0.13	0.20		0.39	0.39		0.10	0.00	0.90	0.61	0.00	0.34
Avail Cap(c_a), veh/h	477	1431		670	1631		440	0	616	236	0	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	23.3	0.0	16.8	21.2	0.0	31.9	0.0	43.5	32.6	0.0	33.5
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.4	0.7	0.0	0.1	0.0	12.5	3.8	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	0.8	2.5	0.0	3.5	5.6	0.0	0.7	0.0	12.4	2.9	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	23.6	0.0	17.2	21.9	0.0	32.0	0.0	56.0	36.4	0.0	33.9
LnGrp LOS	B	C		B	C		C	A	E	D	A	C
Approach Vol, veh/h		335			889			427			313	
Approach Delay, s/veh		23.0			20.6			54.1			34.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	61.0	8.9	40.5	16.8	53.8	13.7	35.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	36.5	9.5	42.5	14.5	31.5	9.5	42.5
Max Q Clear Time (g_c+I1), s	4.0	16.4	3.8	11.5	11.1	8.2	8.3	28.2
Green Ext Time (p_c), s	0.0	6.7	0.0	0.9	0.2	2.8	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	42	485	55	69	487
Future Vol, veh/h	33	42	485	55	69	487
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	-	-	250	310	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	10	2	2	8
Mvmt Flow	36	46	527	60	75	529

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1206	527	0	0	587	0
Stage 1	527	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	203	551	-	-	988	-
Stage 1	592	-	-	-	-	-
Stage 2	504	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	551	-	-	988	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	466	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.6	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	298	988	-
HCM Lane V/C Ratio	-	-	0.274	0.076	-
HCM Control Delay (s)	-	-	21.6	8.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.2	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	37	49	183	111	2
Future Vol, veh/h	3	37	49	183	111	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	175	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	40	53	199	121	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	252	0	-	0	99	53
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	46	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1313	-	-	-	900	1014
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	976	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1313	-	-	-	898	1014
Mov Cap-2 Maneuver	-	-	-	-	898	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	976	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1313	-	-	-	900
HCM Lane V/C Ratio	0.002	-	-	-	0.136
HCM Control Delay (s)	7.7	-	-	-	9.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.5

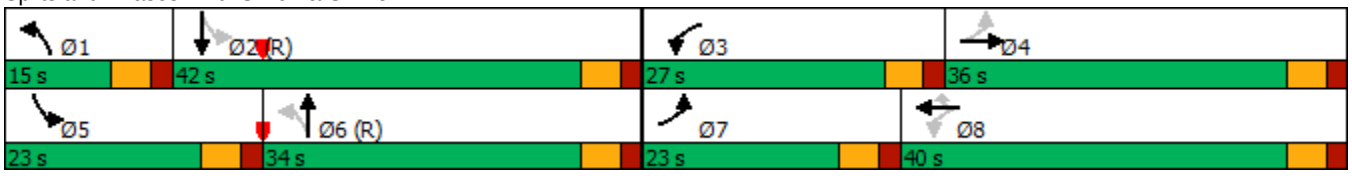
Future “Build” Intersections Analysis with Improvements

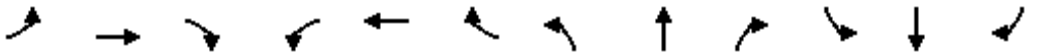
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	266	271	43	163	57	19	339	240	533
Future Volume (vph)	266	271	43	163	57	19	339	240	533
Lane Group Flow (vph)	283	315	46	173	61	20	406	255	767
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8		1	6	5	2
Permitted Phases	4		8		8	6		2	
Detector Phase	7	4	3	8	8	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	30.5	15.0	28.5	15.0	28.5
Total Split (s)	23.0	36.0	27.0	40.0	40.0	15.0	34.0	23.0	42.0
Total Split (%)	19.2%	30.0%	22.5%	33.3%	33.3%	12.5%	28.3%	19.2%	35.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.75	0.72	0.21	0.68	0.17	0.10	0.61	0.54	0.83
Control Delay	43.1	51.0	27.2	60.2	1.0	17.0	37.6	19.2	35.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.1	51.0	27.2	60.2	1.0	17.0	37.6	19.2	35.8
Queue Length 50th (ft)	172	229	24	129	0	6	245	95	425
Queue Length 95th (ft)	226	311	45	189	0	21	#509	173	#923
Internal Link Dist (ft)		3937		1310			3134		1962
Turn Bay Length (ft)	245		205		250	195		190	
Base Capacity (vph)	379	457	396	470	534	251	670	502	923
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.69	0.12	0.37	0.11	0.08	0.61	0.51	0.83

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	271	25	43	163	57	19	339	42	240	533	188
Future Volume (veh/h)	266	271	25	43	163	57	19	339	42	240	533	188
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1737	1900	1633	1663	1707	1900	1826	1811	1870	1856	1811
Adj Flow Rate, veh/h	283	288	27	46	173	61	20	361	0	255	567	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	11	0	18	16	13	0	5	6	2	3	6
Cap, veh/h	336	372	35	174	209	182	367	825		549	974	
Arrive On Green	0.15	0.24	0.24	0.03	0.13	0.13	0.02	0.45	0.00	0.09	0.52	0.00
Sat Flow, veh/h	1711	1564	147	1555	1663	1447	1810	1826	0	1781	1856	0
Grp Volume(v), veh/h	283	0	315	46	173	61	20	361	0	255	567	0
Grp Sat Flow(s),veh/h/ln	1711	0	1711	1555	1663	1447	1810	1826	0	1781	1856	0
Q Serve(g_s), s	16.9	0.0	20.6	3.1	12.2	4.6	0.7	16.2	0.0	8.8	25.1	0.0
Cycle Q Clear(g_c), s	16.9	0.0	20.6	3.1	12.2	4.6	0.7	16.2	0.0	8.8	25.1	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	336	0	407	174	209	182	367	825		549	974	
V/C Ratio(X)	0.84	0.00	0.77	0.26	0.83	0.34	0.05	0.44		0.46	0.58	
Avail Cap(c_a), veh/h	336	0	435	400	478	416	474	825		643	974	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	42.7	43.9	51.2	47.9	18.0	22.5	0.0	15.3	19.5	0.0
Incr Delay (d2), s/veh	17.2	0.0	8.0	0.8	8.1	1.1	0.1	1.7	0.0	0.6	2.5	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	8.3	0.0	9.2	1.2	5.3	1.7	0.3	6.9	0.0	3.3	10.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	0.0	50.7	44.7	59.2	48.9	18.1	24.1	0.0	15.9	22.1	0.0
LnGrp LOS	D	A	D	D	E	D	B	C		B	C	
Approach Vol, veh/h		598			280			381			822	
Approach Delay, s/veh		52.6			54.6			23.8			20.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	68.5	9.5	34.1	16.7	59.7	23.0	20.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	36.5	21.5	30.5	17.5	28.5	17.5	34.5
Max Q Clear Time (g_c+I1), s	2.7	27.1	5.1	22.6	10.8	18.2	18.9	14.2
Green Ext Time (p_c), s	0.0	3.8	0.1	0.9	0.4	2.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

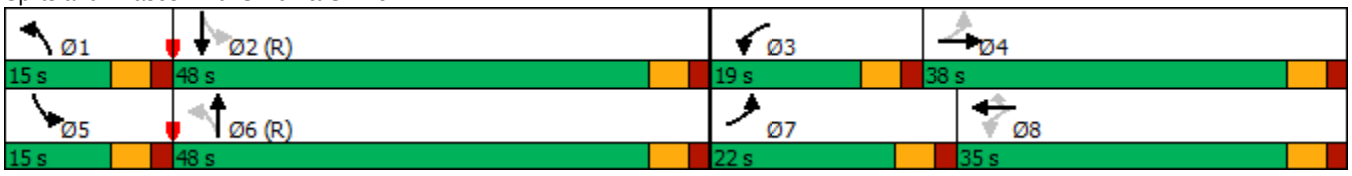
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

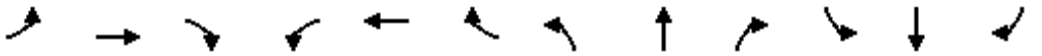
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	280	171	68	315	196	11	672	65	426
Future Volume (vph)	280	171	68	315	196	11	672	65	426
Lane Group Flow (vph)	286	181	69	321	200	11	721	66	745
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8		1	6	5	2
Permitted Phases	4		8		8	6		2	
Detector Phase	7	4	3	8	8	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	15.0	30.5	30.5	15.0	28.5	15.0	28.5
Total Split (s)	22.0	38.0	19.0	35.0	35.0	15.0	48.0	15.0	48.0
Total Split (%)	18.3%	31.7%	15.8%	29.2%	29.2%	12.5%	40.0%	12.5%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.87	0.40	0.20	0.84	0.40	0.07	0.94	0.39	0.85
Control Delay	53.7	36.9	23.8	64.1	7.5	17.3	55.7	22.9	37.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.7	36.9	23.8	64.1	7.5	17.3	55.7	22.9	37.9
Queue Length 50th (ft)	157	113	33	237	0	4	550	25	459
Queue Length 95th (ft)	#274	180	61	334	59	15	#882	53	#882
Internal Link Dist (ft)		3937		1310			3134		1962
Turn Bay Length (ft)	245		205		250	195		190	
Base Capacity (vph)	327	459	414	449	547	220	770	193	873
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.39	0.17	0.71	0.37	0.05	0.94	0.34	0.85

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: SR 92 & SR 154





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	171	7	68	315	196	11	672	34	65	426	304
Future Volume (veh/h)	280	171	7	68	315	196	11	672	34	65	426	304
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1559	1900	1737	1841	1900	1900	1870	1352	1826	1870	1841
Adj Flow Rate, veh/h	286	174	7	69	321	200	11	686	0	66	435	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	23	0	11	4	0	0	2	37	5	2	4
Cap, veh/h	321	431	17	353	363	318	381	832		215	877	
Arrive On Green	0.14	0.29	0.29	0.05	0.20	0.20	0.01	0.44	0.00	0.04	0.47	0.00
Sat Flow, veh/h	1725	1488	60	1654	1841	1610	1810	1870	0	1739	1870	0
Grp Volume(v), veh/h	286	0	181	69	321	200	11	686	0	66	435	0
Grp Sat Flow(s),veh/h/ln	1725	0	1548	1654	1841	1610	1810	1870	0	1739	1870	0
Q Serve(g_s), s	15.5	0.0	11.3	4.0	20.3	13.7	0.4	38.6	0.0	2.5	19.3	0.0
Cycle Q Clear(g_c), s	15.5	0.0	11.3	4.0	20.3	13.7	0.4	38.6	0.0	2.5	19.3	0.0
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	321	0	449	353	363	318	381	832		215	877	
V/C Ratio(X)	0.89	0.00	0.40	0.20	0.88	0.63	0.03	0.82		0.31	0.50	
Avail Cap(c_a), veh/h	321	0	449	465	453	396	502	832		288	877	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	0.0	34.3	35.9	46.8	44.1	18.9	29.2	0.0	23.6	22.1	0.0
Incr Delay (d2), s/veh	25.1	0.0	0.6	0.3	15.7	2.1	0.0	9.1	0.0	0.8	2.0	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	8.3	0.0	4.1	1.6	10.4	5.4	0.2	18.1	0.0	1.0	8.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.0	0.0	34.9	36.2	62.5	46.3	18.9	38.4	0.0	24.4	24.1	0.0
LnGrp LOS	E	A	C	D	E	D	B	D		C	C	
Approach Vol, veh/h		467			590			697			501	
Approach Delay, s/veh		49.0			53.9			38.0			24.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	61.8	10.9	40.3	9.9	58.9	22.0	29.2
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	42.5	13.5	32.5	9.5	42.5	16.5	29.5
Max Q Clear Time (g_c+I1), s	2.4	21.3	6.0	13.3	4.5	40.6	17.5	22.3
Green Ext Time (p_c), s	0.0	4.5	0.1	0.7	0.0	1.2	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Traffic Volume Worksheets

24-015 - DRI # 4074 Cascade Palmetto Highway & Ridge Road - City of South Fulton, GA

Traffic Volumes

A&R Engineering
March 2024

1. SR 92 @ Thompson Rd

A.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Thompson Road Eastbound				Thompson Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	141	964	120	1225	63	965	5	1033	4	9	79	92	181	9	61	251
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	149	1022	127	1298	67	1023	5	1095	4	10	84	98	192	10	65	267
Total New Trips:	0	29	0	29	0	89	0	89	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	149	1051	127	1327	67	1112	5	1184	4	10	84	98	192	10	65	267

P.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Thompson Road Eastbound				Thompson Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	59	1114	103	1276	130	822	0	952	7	10	87	104	288	4	87	379
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	63	1181	109	1353	138	871	0	1009	7	11	92	110	305	4	92	401
Total New Trips:	0	100	0	100	0	61	0	61	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	63	1281	109	1453	138	932	0	1070	7	11	92	110	305	4	92	401

24-015 - DRI # 4074 Cascade Palmetto Highway & Ridge Road - City of South Fulton, GA

Traffic Volumes

A&R Engineering
March 2024

2. SR 92 @ Hall Rd

A.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Hall Road Eastbound				Hall Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	330	539	74	943	62	658	146	866	108	30	306	444	69	111	67	247
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	350	571	78	999	66	697	155	918	114	32	324	470	73	118	71	262
Total New Trips:	0	29	0	29	0	89	0	89	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	350	600	78	1028	66	786	155	1007	114	32	324	470	73	118	71	262

P.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Hall Road Eastbound				Hall Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	143	992	45	1180	51	659	54	764	118	18	244	380	61	12	102	175
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	152	1052	48	1252	54	699	57	810	125	19	259	403	65	13	108	186
Total New Trips:	0	100	0	100	0	61	0	61	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	152	1152	48	1352	54	760	57	871	125	19	259	403	65	13	108	186

24-015 - DRI # 4074 Cascade Palmetto Highway & Ridge Road - City of South Fulton, GA

Traffic Volumes

A&R Engineering
March 2024

3. SR 92 @ Jones Rd

A.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Jones Road Eastbound				Jones Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	10	599	79	688	61	874	44	979	1	3	0	4	52	14	17	83
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	11	635	84	730	65	926	47	1038	1	3	0	4	55	15	18	88
Total New Trips:	0	29	0	29	0	89	0	89	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	11	664	84	759	65	1015	47	1127	1	3	0	4	55	15	18	88

P.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Jones Road Eastbound				Jones Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	1	1102	98	1201	19	733	15	767	1	3	1	5	56	5	30	91
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	1	1168	104	1273	20	777	16	813	1	3	1	5	59	5	32	96
Total New Trips:	0	100	0	100	0	61	0	61	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	1	1268	104	1373	20	838	16	874	1	3	1	5	59	5	32	96

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Traffic Volumes

A&R Engineering
March 2024

4. SR 92 @ Demooney Rd

A.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				- Eastbound				Demooney Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	349	243	592	15	628	0	643	0	0	0	0	236	0	14	250
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	370	258	628	16	666	0	682	0	0	0	0	250	0	15	265
Total New Trips:	0	29	0	29	0	89	0	89	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	0	399	258	657	16	755	0	771	0	0	0	0	250	0	15	265

P.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				- Eastbound				Demooney Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	687	345	1032	17	484	0	501	0	0	0	0	179	0	9	188
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	728	366	1094	18	513	0	531	0	0	0	0	190	0	10	200
Total New Trips:	0	100	0	100	0	61	0	61	0	0	0	0	0	0	0	0
Future 2027 Traffic Volumes:	0	828	366	1194	18	574	0	592	0	0	0	0	190	0	10	200

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Traffic Volumes

A&R Engineering
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5. SR 92 @ Ridge-Butner Rd

A.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Ridge Road Eastbound				Butner Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	44	296	27	367	54	502	27	583	19	53	38	110	43	57	38	138
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	47	314	29	390	57	532	29	618	20	56	40	116	46	60	40	146
Total New Trips:	29	0	0	29	0	0	14	14	41	9	89	139	0	3	0	3
Future 2027 Traffic Volumes:	76	314	29	419	57	532	43	632	61	65	129	255	46	63	40	149

P.M. Peak Hour

	SR 92 Northbound				SR 92 Southbound				Ridge Road Eastbound				Butner Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	26	630	26	682	36	351	12	399	8	40	30	78	71	37	68	176
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	28	668	28	724	38	372	13	423	8	42	32	82	75	39	72	186
Total New Trips:	100	0	0	100	0	0	46	46	28	6	61	95	0	10	0	10
Future 2027 Traffic Volumes:	128	668	28	824	38	372	59	469	36	48	93	177	75	49	72	196

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Traffic Volumes

A&R Engineering
March 2024

6. SR 92 @ SR 154

A.M. Peak Hour

Condition	SR 92 Northbound				SR 92 Southbound				SR 154 / SR 70 (Cascade Palmetto Highway) Eastbound				SR 70 (Cascade Palmetto Highway) Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	18	288	33	339	226	492	161	879	203	245	24	472	39	151	54	244
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	19	305	35	359	240	522	171	933	215	260	25	500	41	160	57	258
Total New Trips:	0	34	7	41	0	11	17	28	51	11	0	62	2	3	0	5
Future 2027 Traffic Volumes:	19	339	42	400	240	533	188	961	266	271	25	562	43	163	57	263

P.M. Peak Hour

Condition	SR 92 Northbound				SR 92 Southbound				SR 154 / SR 70 (Cascade Palmetto Highway) Eastbound				SR 70 (Cascade Palmetto Highway) Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	10	612	27	649	61	366	233	660	231	155	7	393	57	286	185	528
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	11	649	29	689	65	388	247	700	245	164	7	416	60	303	196	559
Total New Trips:	0	23	5	28	0	38	57	95	35	7	0	42	8	12	0	20
Future 2027 Traffic Volumes:	11	672	34	717	65	426	304	795	280	171	7	458	68	315	196	579

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Traffic Volumes

A&R Engineering
March 2024

7. SR 92-SR 154 @ SR 166

A.M. Peak Hour

	SR 92 / SR 154 Northbound				SR 166 Southbound				- Eastbound				SR 92 / SR 154 Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	275	287	562	80	535	0	615	0	0	0	0	455	0	78	533
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	292	304	596	85	567	0	652	0	0	0	0	482	0	83	565
Total New Trips:	0	47	38	85	0	16	0	16	0	0	0	0	13	0	0	13
Future 2027 Traffic Volumes:	0	339	342	681	85	583	0	668	0	0	0	0	495	0	83	578

P.M. Peak Hour

	SR 92 / SR 154 Northbound				SR 166 Southbound				- Eastbound				SR 92 / SR 154 Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	679	479	1158	62	320	0	382	0	0	0	0	424	0	119	543
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	720	508	1228	66	339	0	405	0	0	0	0	449	0	126	575
Total New Trips:	0	32	26	58	0	53	0	53	0	0	0	0	43	0	0	43
Future 2027 Traffic Volumes:	0	752	534	1286	66	392	0	458	0	0	0	0	492	0	126	618

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Traffic Volumes

A&R Engineering
March 2024

8. Ridge Rd @ Clark Rd-Drwy 2 W

A.M. Peak Hour

	Ridge Road Northbound				Ridge Road Southbound				Site Driveway 2 (Western) Eastbound				Clark Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	37	10	47	5	37	0	42	0	0	0	0	7	0	4	11
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	39	11	50	5	39	0	44	0	0	0	0	7	0	4	11
Total New Trips:	1	1	10	12	0	3	1	4	3	12	2	17	3	4	0	7
Future 2027 Traffic Volumes:	1	40	21	62	5	42	1	48	3	12	2	17	10	4	4	18

P.M. Peak Hour

	Ridge Road Northbound				Ridge Road Southbound				Site Driveway 2 (Western) Eastbound				Clark Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	34	8	42	1	45	0	46	0	0	0	0	6	0	3	9
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	36	8	44	1	48	0	49	0	0	0	0	6	0	3	9
Total New Trips:	2	3	7	12	0	2	3	5	2	8	1	11	12	14	0	26
Future 2027 Traffic Volumes:	2	39	15	56	1	50	3	54	2	8	1	11	18	14	3	35

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Traffic Volumes

A&R Engineering
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9. Ridge Rd @ Bethlehem Rd

A.M. Peak Hour

	Bethlehem Road Northbound				- Southbound				Ridge Road Eastbound				Ridge Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	8	0	46	54	0	0	0	0	0	30	13	43	28	32	0	60
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	8	0	49	57	0	0	0	0	0	32	14	46	30	34	0	64
Total New Trips:	9	0	0	9	0	0	0	0	0	139	27	166	0	46	0	46
Future 2027 Traffic Volumes:	17	0	49	66	0	0	0	0	0	171	41	212	30	80	0	110

P.M. Peak Hour

	Bethlehem Road Northbound				- Southbound				Ridge Road Eastbound				Ridge Road Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	6	0	27	33	0	0	0	0	0	27	6	33	41	37	0	78
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	6	0	29	35	0	0	0	0	0	29	6	35	43	39	0	82
Total New Trips:	30	0	0	30	0	0	0	0	0	95	18	113	0	156	0	156
Future 2027 Traffic Volumes:	36	0	29	65	0	0	0	0	0	124	24	148	43	195	0	238

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Traffic Volumes

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10. Bethlehem Rd @ Clark Rd

A.M. Peak Hour

Condition	Bethlehem Road Northbound				Bethlehem Road Southbound				Clark Road Eastbound				- Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	7	35	0	42	0	57	1	58	3	0	7	10	0	0	0	0
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	7	37	0	44	0	60	1	61	3	0	7	10	0	0	0	0
Total New Trips:	8	9	0	17	0	27	0	27	0	0	23	23	0	0	0	0
Future 2027 Traffic Volumes:	15	46	0	61	0	87	1	88	3	0	30	33	0	0	0	0

P.M. Peak Hour

Condition	Bethlehem Road Northbound				Bethlehem Road Southbound				Clark Road Eastbound				- Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	7	43	0	50	0	33	2	35	0	0	7	7	0	0	0	0
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	7	46	0	53	0	35	2	37	0	0	7	7	0	0	0	0
Total New Trips:	26	30	0	56	0	18	0	18	0	0	16	16	0	0	0	0
Future 2027 Traffic Volumes:	33	76	0	109	0	53	2	55	0	0	23	23	0	0	0	0

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Traffic Volumes

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11. Cedar Grove @ Bethlehem Rd

A.M. Peak Hour

	-				Bethlehem Road				Cedar Grove Road				Cedar Grove Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	62	0	11	73	5	147	0	152	0	103	43	146
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	0	0	0	66	0	12	78	5	156	0	161	0	109	46	155
Total New Trips:	0	0	0	0	50	0	0	50	0	1	0	1	0	0	16	16
Future 2027 Traffic Volumes:	0	0	0	0	116	0	12	128	5	157	0	162	0	109	62	171

P.M. Peak Hour

	-				Bethlehem Road				Cedar Grove Road				Cedar Grove Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	48	0	8	56	6	136	0	142	0	178	64	242
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	0	0	0	51	0	8	59	6	144	0	150	0	189	68	257
Total New Trips:	0	0	0	0	34	0	0	34	0	1	0	1	0	1	56	57
Future 2027 Traffic Volumes:	0	0	0	0	85	0	8	93	6	145	0	151	0	190	124	314

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Traffic Volumes

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12. S. Fulton @ Cedar Grove Rd

A.M. Peak Hour

	Cedar Grove Road				Cedar Grove Road				South Fulton Parkway				South Fulton Parkway			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	14	88	262	364	159	149	18	326	27	639	33	699	127	297	84	508
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	15	93	278	386	169	158	19	346	29	677	35	741	135	315	89	539
Total New Trips:	0	1	0	1	22	3	26	51	9	0	0	9	0	0	7	7
Future 2027 Traffic Volumes:	15	94	278	387	191	161	45	397	38	677	35	750	135	315	96	546

P.M. Peak Hour

	Cedar Grove Road				Cedar Grove Road				South Fulton Parkway				South Fulton Parkway			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	30	185	165	380	103	132	12	247	20	253	36	309	220	577	135	932
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	32	196	175	403	109	140	13	262	21	268	38	327	233	612	143	988
Total New Trips:	0	3	0	3	15	2	18	35	29	0	0	29	0	0	25	25
Future 2027 Traffic Volumes:	32	199	175	406	124	142	31	297	50	268	38	356	233	612	168	1013

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Traffic Volumes

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13. SR 154 @ Drwy 1

A.M. Peak Hour

Condition	SR 154 / SR 70 (Cascade Palmetto Highway) Northbound				SR 154 / SR 70 (Cascade Palmetto Highway) Southbound				- Eastbound				Site Driveway 1 Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	398	0	398	0	373	0	373	0	0	0	0	0	0	0	0
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	422	0	422	0	395	0	395	0	0	0	0	0	0	0	0
Total New Trips:	0	0	16	16	20	0	0	20	0	0	0	0	49	0	62	111
Future 2027 Traffic Volumes:	0	422	16	438	20	395	0	415	0	0	0	0	49	0	62	111

P.M. Peak Hour

Condition	SR 154 / SR 70 (Cascade Palmetto Highway) Northbound				SR 154 / SR 70 (Cascade Palmetto Highway) Southbound				- Eastbound				Site Driveway 1 Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	458	0	458	0	459	0	459	0	0	0	0	0	0	0	0
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	485	0	485	0	487	0	487	0	0	0	0	0	0	0	0
Total New Trips:	0	0	55	55	69	0	0	69	0	0	0	0	33	0	42	75
Future 2027 Traffic Volumes:	0	485	55	540	69	487	0	556	0	0	0	0	33	0	42	75

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Traffic Volumes

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14. Ridge Rd @ Drwy 3 (E)

A.M. Peak Hour

	-				Site Driveway 3 (Eastern)				Ridge Road				Ridge Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	0	0	0	0	0	43	0	43	0	40	0	40
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	0	0	0	0	0	0	0	0	46	0	46	0	42	0	42
Total New Trips:	0	0	0	0	163	0	3	166	1	3	0	4	0	1	54	55
Future 2027 Traffic Volumes:	0	0	0	0	163	0	3	166	1	49	0	50	0	43	54	97

P.M. Peak Hour

	-				Site Driveway 3 (Eastern)				Ridge Road				Ridge Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	0	0	0	0	0	33	0	33	0	43	0	43
Growth Factor (%):	2	2	2		2	2	2		2	2	2		2	2	2	
No-Build 2027 Volumes:	0	0	0	0	0	0	0	0	0	35	0	35	0	46	0	46
Total New Trips:	0	0	0	0	111	0	2	113	3	2	0	5	0	3	183	186
Future 2027 Traffic Volumes:	0	0	0	0	111	0	2	113	3	37	0	40	0	49	183	232