DEVELOPMENT OF REGIONAL IMPACT
(DRI #4237)

TRAFFIC STUDY
FOR
LOFTS AT SOUTH FULTON
ON SR 92 (SPENCE ROAD)

CITY OF SOUTH FULTON, GEORGIA

Prepared for:

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A & R Project # 24-144

EXECUTIVE SUMMARY

Traffic impacts were evaluated for the proposed *Lofts at South Fulton* residential development that will be located at 7995 Spence Road in the City of South Fulton, Georgia. The development will consist of 842 apartment units in addition to 2,000 SF of commercial retail space.

The development proposes access at the following locations on SR 92 (Spence Road):

- Site Driveway 1: Full access driveway aligning with the existing northern SiteOne distribution center driveway
- Site Driveway 2: Right-in/right-out driveway to the north of Site Driveway 1

Existing and future 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 74 (Senoia Road) at I-85 Southbound Ramps
2. SR 74 (Senoia Road) at I-85 Northbound Ramps
3. SR 74 (Senoia Road) at Oakley Industrial Boulevard
4. SR 92 (Spence Road) at Oakley Industrial Boulevard
5. SR 92 (Spence Road) at SiteOne North Driveway / Site Driveway 1
6. SR 92 (Spence Road) at SiteOne South Driveway
7. SR 92 (Spence Road) at Lees Lake Road / Lees Mill Road
8. SR 92 (Spence Road) at Site Driveway 2 (Right-In/Right-Out)

Traffic Operations Summary

Table E1 below provides a summary of traffic operations for the "No-Build" and "Build" conditions for the year 2030 with and without improvements. As per GRTA requirements, all approaches that do not meet the level of service (LOS) standard (considered failing) are highlighted in Table E1. Table E1 also includes the project's total added trips and the respective percentages of overall total "Build" condition approach traffic volume for all failing LOS approaches after all improvements are completed.

TABLE E1 – FUTURE INTERSECTION OPERATIONS AT FAILING APPROACHES

Intersection		*No-Build Condition: LOS (Delay)*				*Build Condition: LOS (Delay)*							
		NO IMPROVEMENTS		SITE MITIGATION IMPROVEMENTS		NO IMPROVEMENTS		SITE MITIGATION IMPROVEMENTS		SITE VOLUMES AT FAILING APPROACH WITH IMPROVEMENTS		PRECENT SITE TRIPS OF TOTAL APPROACH TRIPS AT FAILING APPROACHES	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
5	**SR 92 (Spence Road) @ SiteOne North Driveway / Site Driveway 1 (South)**							**B (10.8)**	**A (5.9)**				
	-Eastbound Approach	-	-	N/A	N/A	F (178.5)	F (105.9)	D (36.6)	D (41.1)	No Failing Approach	No Failing approach	No Failing approach	No Failing approach
	-Westbound Approach	B (14.5)	B (13.8)			B (14.5)	B (13.8)	C (28.3)	D (35.9)				
	-Northbound Left	-	-			A (8.4)	A (9.2)	A (8.2)	A (4.2)				
	-Southbound Left	B (10.4)	B (10.1)			B (10.4)	B (10.1)	A (0.9)	A (0.9)				
7	**SR 92 (Spence Rd) @ Lees Lake Rd / Lees Mill Rd**												
	-Eastbound Left	A (8.2)	A (8.3)	A (8.2)	A (8.3)	A (8.2)	A (8.4)	A (8.2)	A (8.4)	-	-	-	-
	-Westbound Left	A (8.4)	A (8.8)	A (8.4)	A (8.8)	A (8.6)	A (8.9)	A (8.6)	A (8.9)	-	-	-	-
	-Northbound Approach	D (31.1)	E (39.5)	D (31.1)	E (39.5)	E (39.1)	F (55.6)	E (39.1)	F (55.6)	4	10	3%	10%
	-Southbound Approach	C (16.1)	D (27.2)	C (16.1)	D (27.2)	C (17.2)	D (29.9)	C (17.2)	D (29.9)	-	-	-	-

The results of the future traffic operations analysis indicate that the stop-controlled eastbound (site driveway 1) approach at intersection 5 will operate at a level of service "F" in the AM and PM peak hours. Intersection 5 will operate at an overall level of service "B" or better during the AM and PM peak hours with a traffic signal, and the minor street approaches will operate at a level of service "D" or better. The northbound (Lees Lake Road) approach at intersection 7 will operate at a level of service "E/F" during peak hours under "Build" conditions, however, the proposed site will not contribute to any significant increase in traffic at this approach, as shown in Table E1. The minor street approach (Lees Lake Road / Lees Mill Road) traffic volumes at intersection 7 are too low to satisfy warrants for a traffic signal, and therefore no suitable site mitigation improvements can be recommended here.

Recommended Site Mitigation Improvements

A preliminary signal warrant analysis was conducted based on the projected future "Build" condition AM and PM peak hour volumes at intersection 5 to determine if a traffic signal serves as a suitable site mitigation improvement at site driveway 1. The signal warrant analysis used right turn reductions for the side street traffic volumes and accounted for two approach lanes for site driveway 1. The analysis results indicated that warrant 2 (four-hour vehicular warrant) will not be met but warrant 3 (peak hour warrant) will be satisfied. Warrant 1 (eight-hour vehicular warrant) could not be fully evaluated as only peak hour data from the study was available. It is therefore recommended that a full intersection control evaluation (ICE) study be conducted with 12-hour traffic counts from 7 AM to 7 PM to determine if a traffic signal will be warranted at the intersection of SR 92 and site driveway 1. The preliminary signal warrant analysis results are available in the appendix.

Recommendations for Site Access Configuration

The following access configurations are recommended for the proposed site driveway intersections:

- Site Driveway 1: Full access driveway on SR 92 (Spence Road) aligning with the northern SiteOne distribution center driveway
    - One entering lane and two exiting lanes
    - A right turn lane and a left turn lane on SR 92 for entering traffic
    - Provide/confirm adequate sight distance per AASHTO standards
    - An intersection control evaluation (ICE) study should be conducted with 12-hour traffic counts (7 AM to 7 PM) to determine if a traffic signal will be warranted. If warrants are not met, conventional (minor stop) control should be used at the driveway.
- Site Driveway 2: Right-in/right-out driveway on SR 92 (Spence Road), north of Site Driveway 1
    - One entering lane and one exiting lane
    - Stop-sign controlled on the driveway approach with SR 92 remaining free flow
    - A right turn lane on SR 92 for entering traffic

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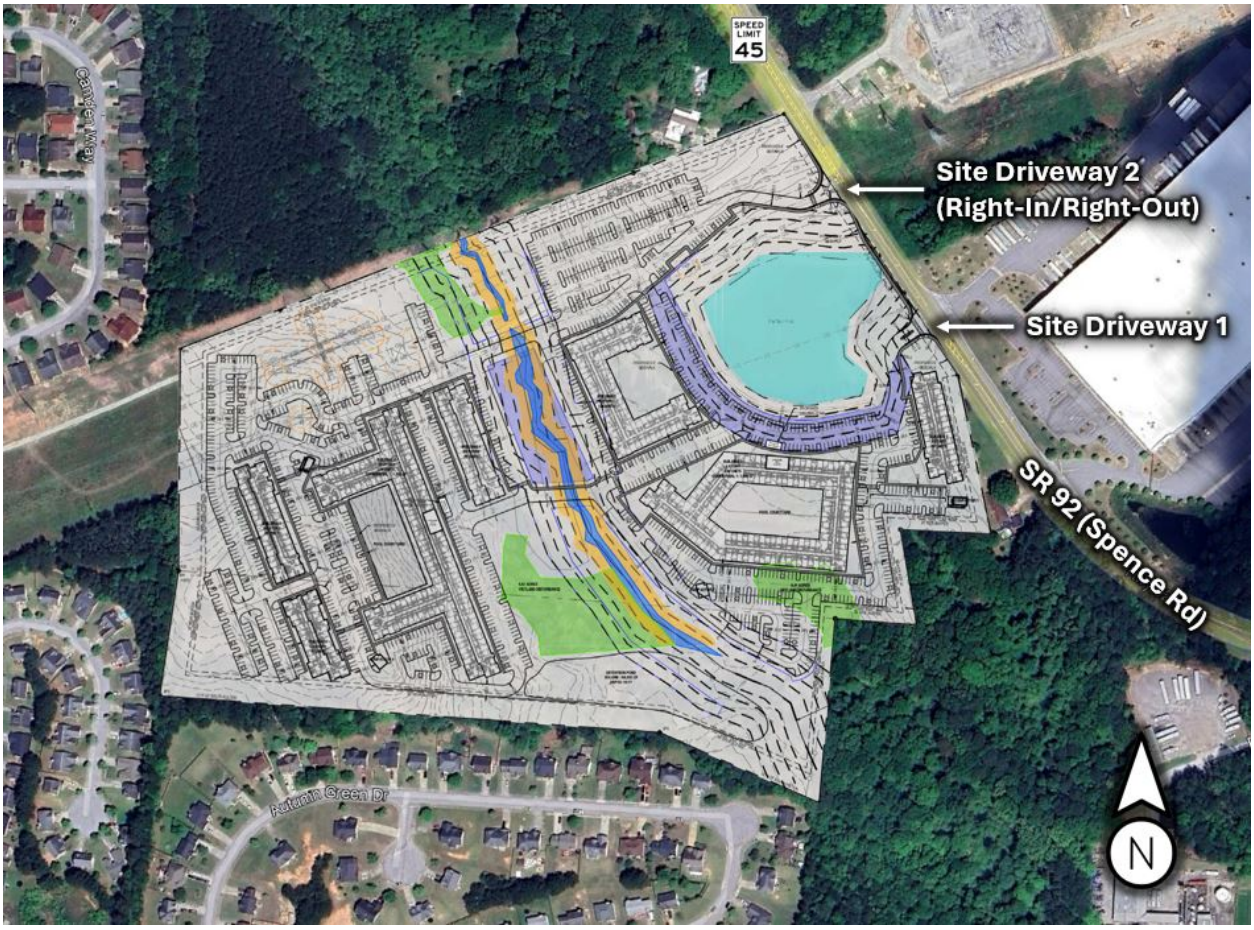
INTRODUCTION

The purpose of this study is to determine the traffic impact that will result from the proposed *Lofts at South Fulton* residential development that will be located at 7995 Spence 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 842 apartment units in addition to 2,000 SF of commercial retail space.



The development proposes access at the following locations on SR 92 (Spence Road):

- Site Driveway 1: Full access driveway aligning with the existing northern SiteOne distribution center driveway
- Site Driveway 2: Right-in/right-out driveway to the north of Site Driveway 1

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

1. SR 74 (Senoia Road) at I-85 Southbound Ramps
2. SR 74 (Senoia Road) at I-85 Northbound Ramps
3. SR 74 (Senoia Road) at Oakley Industrial Boulevard
4. SR 92 (Spence Road) at Oakley Industrial Boulevard
5. SR 92 (Spence Road) at SiteOne North Driveway / Site Driveway 1
6. SR 92 (Spence Road) at SiteOne South Driveway
7. SR 92 (Spence Road) at Lees Lake Road / Lees Mill Road
8. SR 92 (Spence Road) at Site Driveway 2 (Right-In/Right-Out)

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

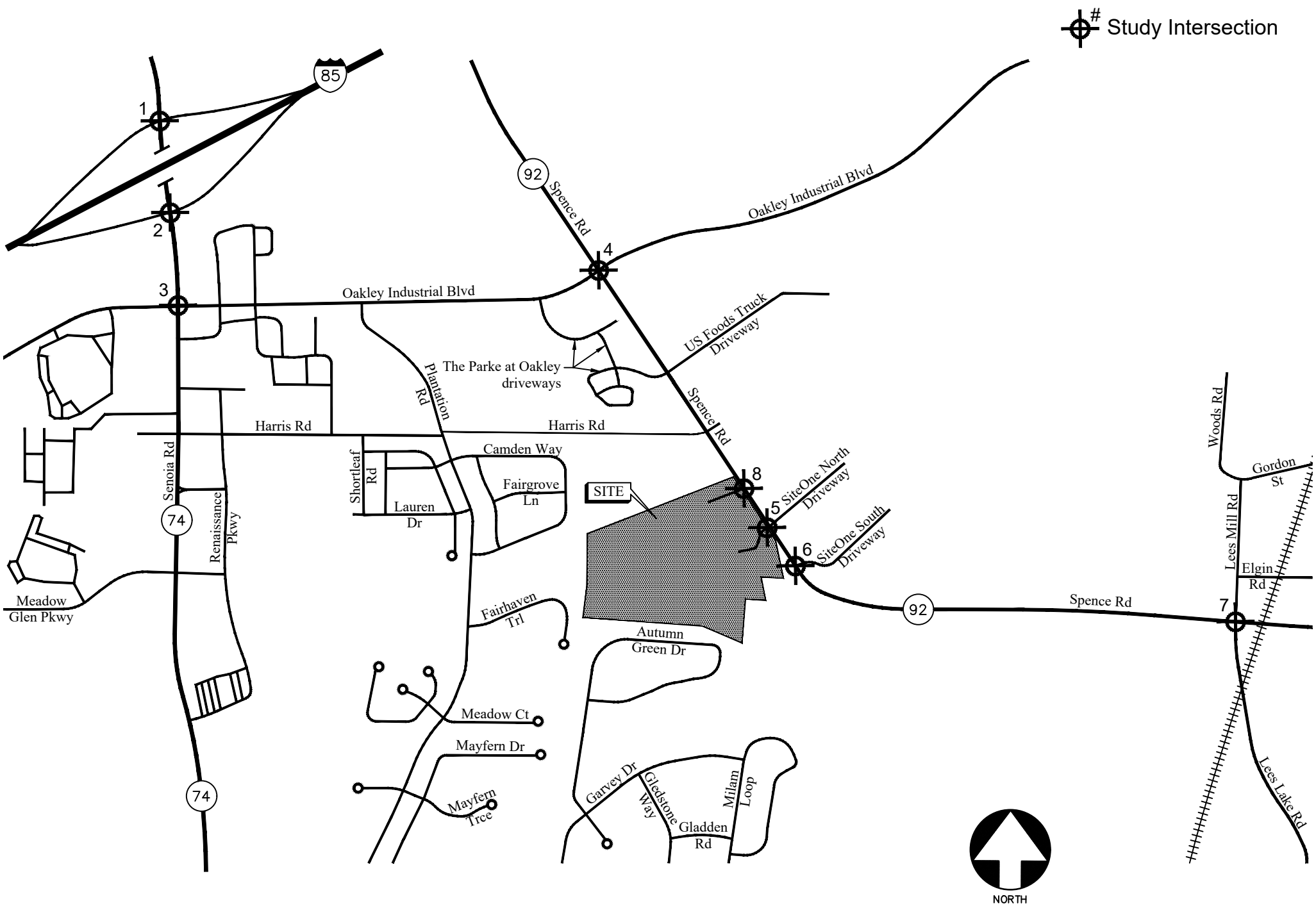
STUDY NETWORK DETERMINATION

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, the City of South Fulton, the City of Fairburn, and Fulton County:

1. SR 74 (Senoia Road) at I-85 Southbound Ramps
2. SR 74 (Senoia Road) at I-85 Northbound Ramps
3. SR 74 (Senoia Road) at Oakley Industrial Boulevard
4. SR 92 (Spence Road) at Oakley Industrial Boulevard
5. SR 92 (Spence Road) at SiteOne North Driveway
6. SR 92 (Spence Road) at SiteOne South Driveway
7. SR 92 (Spence Road) at Lees Lake Road / Lees Mill Road

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:

I-85 (Interstate 85)

I-85 (Interstate 85) is an east-west, seven-lane (4 northbound lanes and 3 southbound lanes), median-divided highway with a posted speed limit of 70 mph in the vicinity of its interchange with SR 74 (Senoia Road). GDOT traffic counts (Station ID 121-0513) indicate that the daily traffic volume on I-85 in 2023 was 135,000 vehicles to the northeast of SR 74.

SR 74 (Senoia Road)

SR 74 (Senoia Road) is a north-south, four-lane, median-divided state highway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID 121-0278) indicate that the daily traffic volume on SR 74 (Senoia Road) in 2023 was 35,900 vehicles south of Oakley Industrial Boulevard. GDOT classifies SR 74 (Senoia Road) as a principal arterial roadway.

SR 92 (Spence Road)

SR 92 (Spence Road) is a two-lane undivided state highway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID 121-0284) indicate that the daily traffic volume on SR 92 (Spence Road) in 2023 was 9,040 vehicles south of Oakley Industrial Boulevard. GDOT classifies SR 92 (Spence Road) as a minor arterial roadway.

Oakley Industrial Boulevard

Oakley Industrial Boulevard 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 121-7239) indicate that the daily traffic volume on Oakley Industrial Boulevard in 2023 was 19,900 vehicles per day between SR 74 (Senoia Road) and SR 92 (Spence Road). GDOT classifies Oakley Industrial Boulevard as a major collector roadway.

Lees Lake Road

Lees Lake Road is a north-south, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the site. GDOT traffic counts (Station ID 121-7237) indicate that the daily traffic volume on Lees Lake Road in 2023 was 1,510 vehicles south of SR 92 (Spence Road). GDOT classifies Lees Lake Road as a major collector roadway.

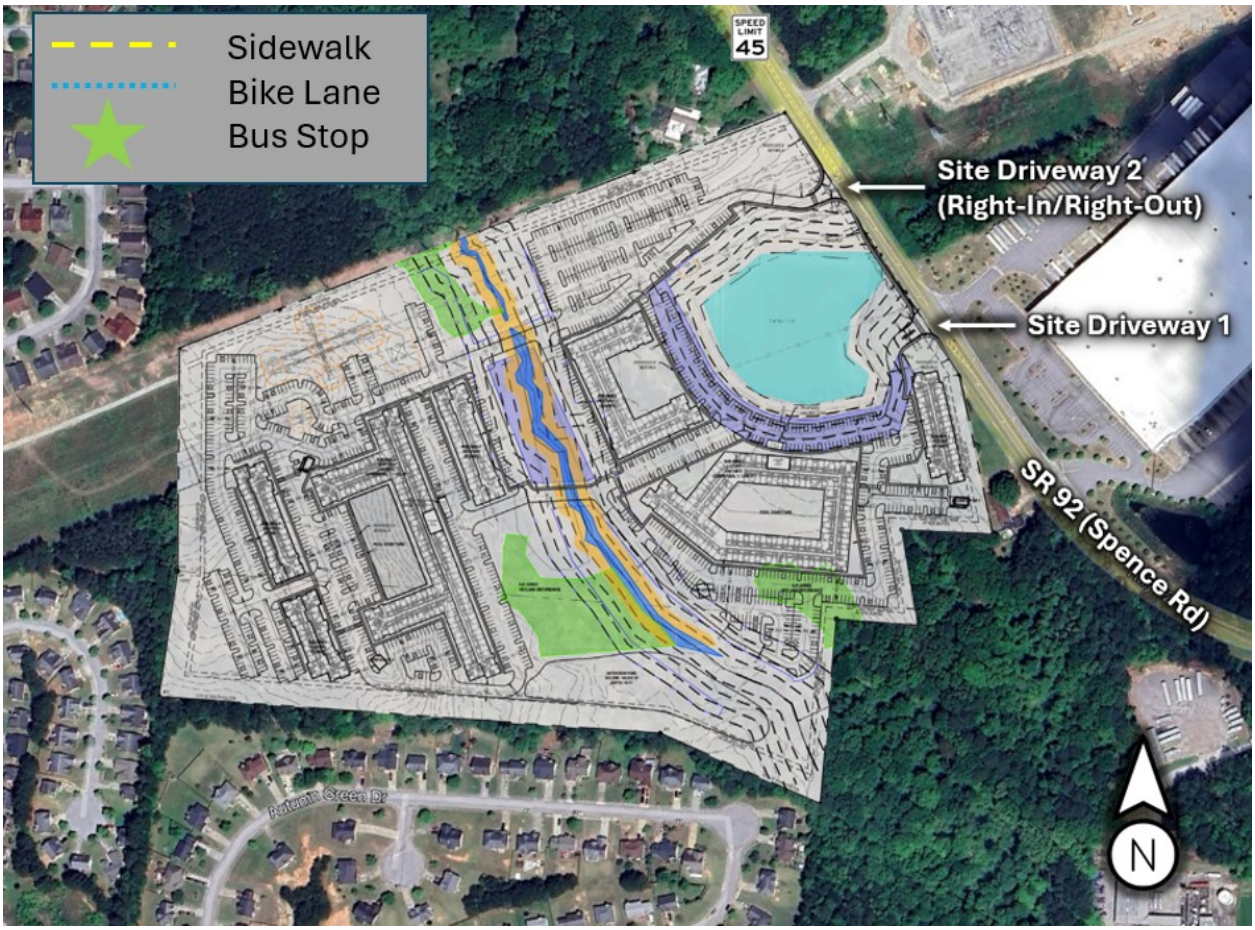
Lees Mill Road

Lees Mill Road is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph.

Existing Bicycle and Pedestrian Facilities

- Sidewalks are present on both sides of SR 92 (Spence Road) from the south of I-85 to The Parke at Oakley South Driveway / US Foods Truck Driveway, and the sidewalk on the east side extends to the US Foods southern employee driveway
- No sidewalks are present on either side of SR 92 along the proposed site frontage
- Pedestrian crosswalks are present at the intersections of SR 92 at Oakley Industrial Boulevard and SR 74 at Oakley Industrial Boulevard
- There are no bike paths in the vicinity of the site
- There is no public transit service within 0.25 miles of the site

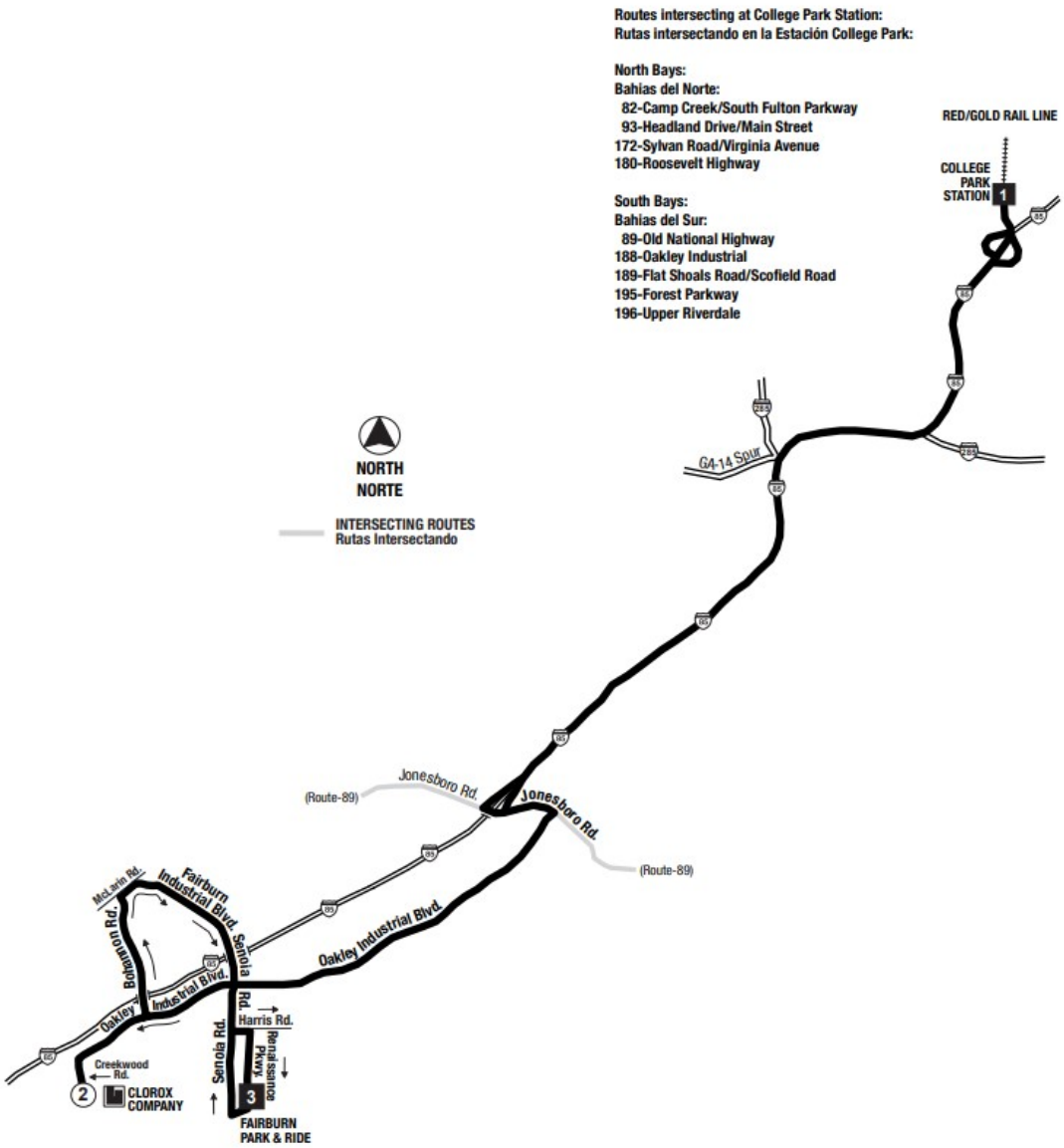
Existing Alternative Transportation Map



Alternative Modes of Access

- Bus stops for MARTA Route 188 are present along Oakley Industrial Boulevard within a ½ mile radius of the proposed development (to the north).
    - Route 188 (Oakley Industrial) operates north/south from College Park Station to Fairburn Park & Ride along I-85, Jonesboro Road, Oakley Industrial Boulevard, Bohannon Road, McLarin Road, Fairburn Industrial Boulevard, Senoia Road, Harris Road, and Renaissance Parkway.
- Fairburn Park & Ride is present within a 1-mile radius of the proposed development on SR 74 (Senoia Road) / Renaissance Parkway.

MARTA Bus Route 188 Map



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. At specific intersections in which HCM 6 is unable to report results for level of service and/or delay times, HCM 2000 was used instead. 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 a 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

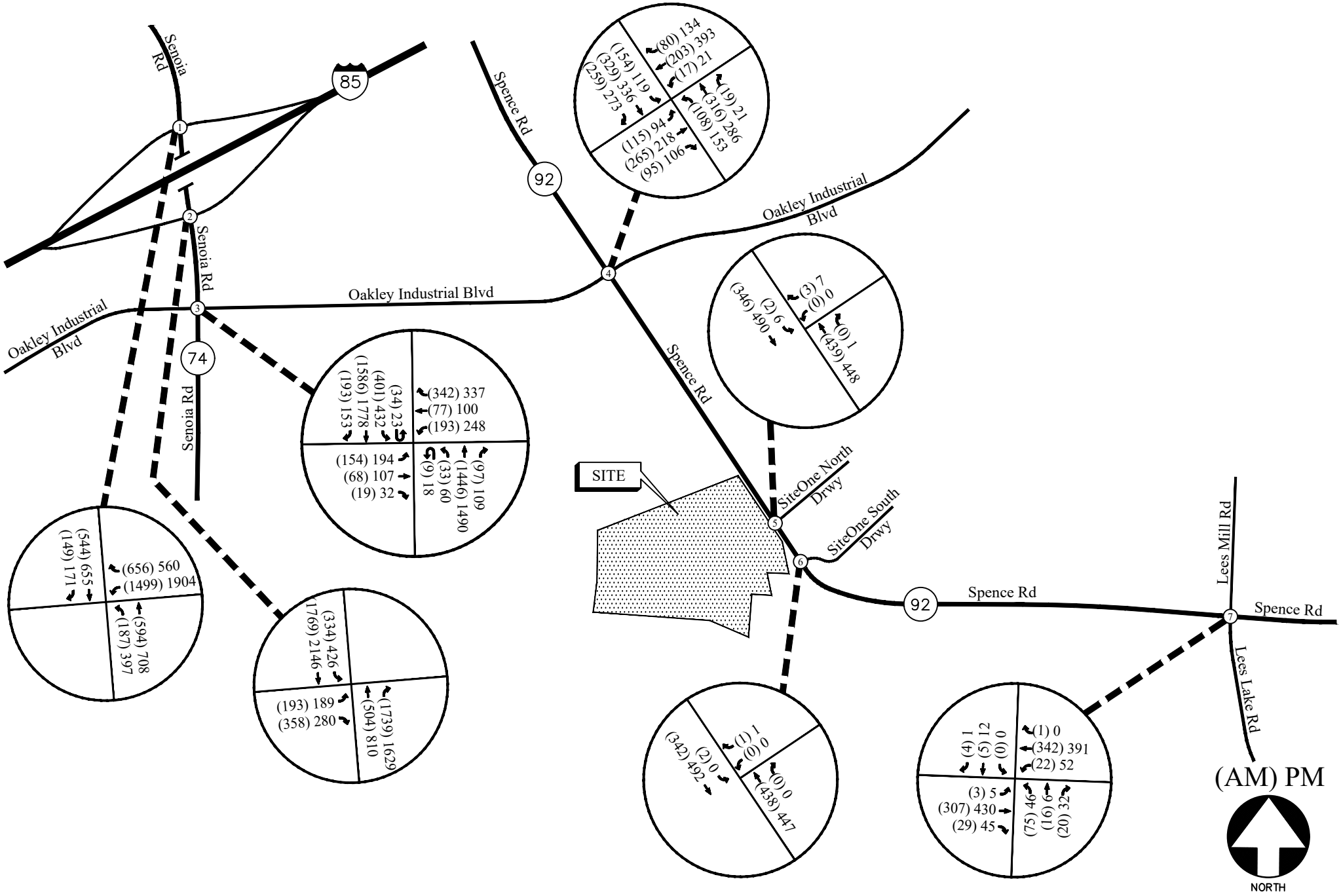
Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. SR 74 (Senoia Road) at I-85 Southbound Ramps
2. SR 74 (Senoia Road) at I-85 Northbound Ramps
3. SR 74 (Senoia Road) at Oakley Industrial Boulevard
4. SR 92 (Spence Road) at Oakley Industrial Boulevard
5. SR 92 (Spence Road) at SiteOne North Driveway
6. SR 92 (Spence Road) at SiteOne South Driveway
7. SR 92 (Spence Road) at Lees Lake Road / Lees Mill Road

Turning movement counts were collected on Wednesday, August 28, 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.

Truck percentages as given on the GDOT Traffic Analysis and Data Application website (TADA) are available for SR 74 (Senoia Road), SR 92 (Spence Road), Oakley Industrial Boulevard, and Lees Lake Road. On the remaining streets within the study network where GDOT truck percentages are not available, heavy vehicle data from the collected traffic counts were used to determine the other percentages to be included in the traffic operations analyses.



EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2

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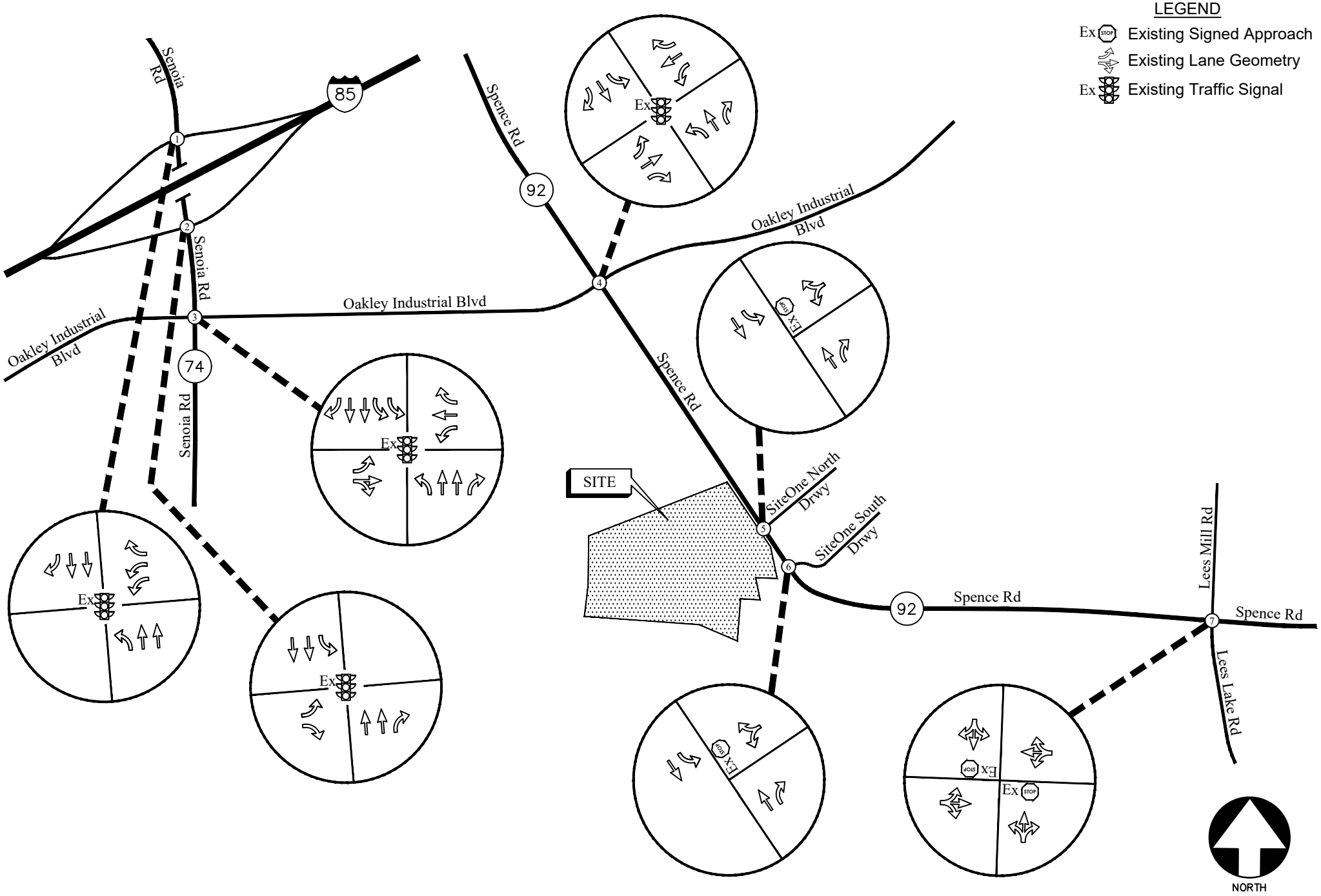

EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3

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Existing Traffic Operations

Existing 2024 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analysis are shown in Table 3.

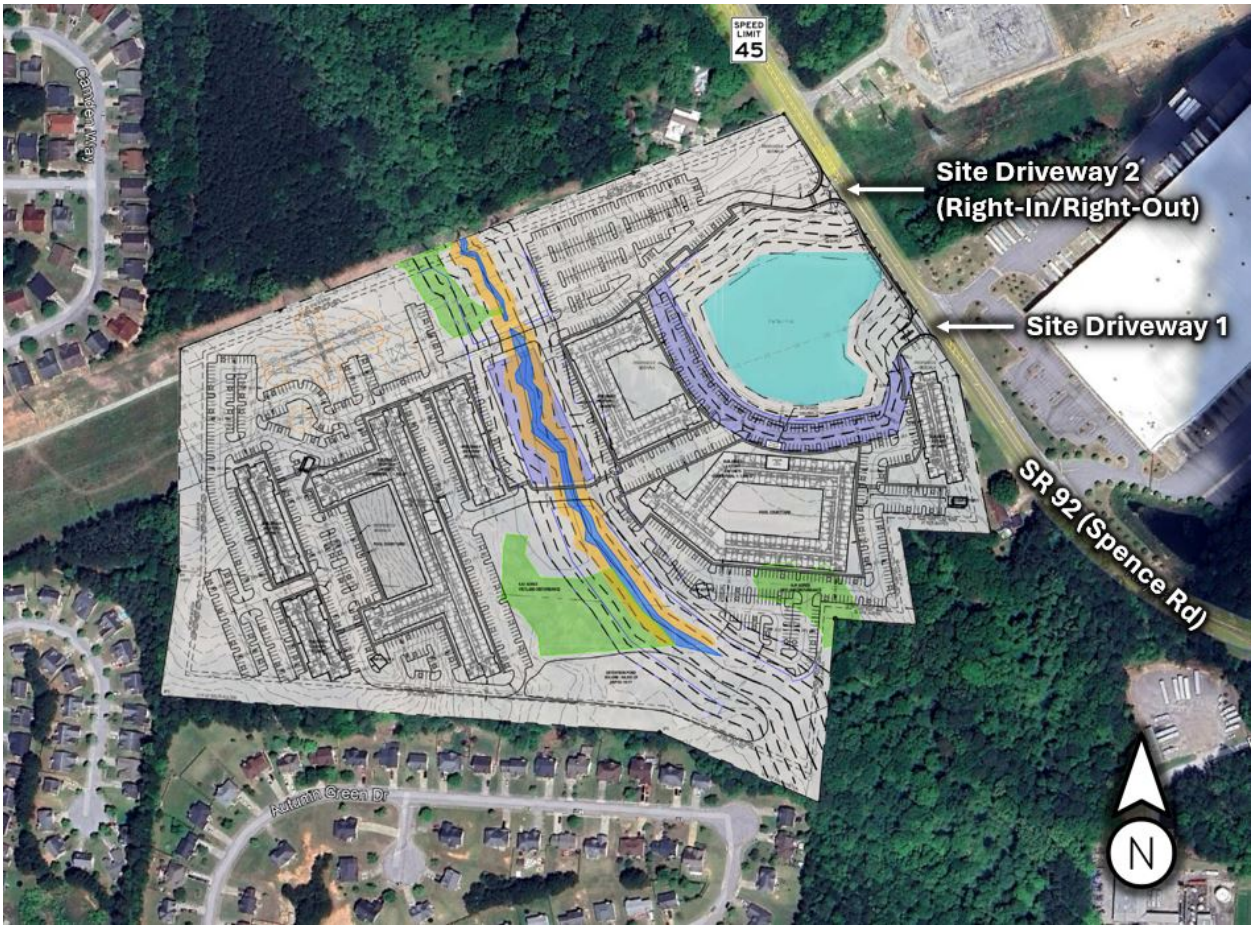
TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	AM Peak	PM Peak	LOS Standard
1	**SR 74 (Senoia Road) @ I-85 Southbound Ramps**	Signalized	**D (47.7)**	**F (87.9)**	**D/E**
	-Westbound Approach		E (59.2)	F (101.2)	E/E
	-Northbound Approach		B (17.8)	E (57.8)	D/D
	-Southbound Approach		E (56.6)	F (97.5)	D/E
2	**SR 74 (Senoia Road) @ I-85 Northbound Ramps**	Signalized	**C (27.9)**	**C (26.2)**	**D/D**
	-Eastbound Approach		F (102.6)	F (113.6)	E/E
	-Northbound Approach		E (70.5)	D (43.2)	D/D
	-Southbound Approach		B (10.8)	B (14.4)	D/D
3	**SR 74 (Senoia Road) @ Oakley Industrial Blvd**	Signalized	**D (52.5)**	**E (57.7)**	**D/D**
	-Eastbound Approach		F (86.0)	F (82.1)	E/E
	-Westbound Approach		F (84.4)	F (85.9)	E/E
	-Northbound Approach		F (80.3)	E (56.8)	E/E
	-Southbound Approach		C (26.6)	D (51.0)	D/D
4	**SR 92 (Spence Road) @ Oakley Industrial Blvd**	Signalized	**C (21.9)**	**D (23.8)**	**D/D**
	-Eastbound Approach		C (33.5)	C (27.6)	D/D
	-Westbound Approach		C (29.5)	C (27.6)	D/D
	-Northbound Approach		B (15.6)	B (19.6)	D/D
	-Southbound Approach		B (14.7)	C (21.8)	D/D
5	**SR 92 (Spence Road) @ SiteOne North Driveway**	Stop Controlled on WB Approach			
	-Westbound Approach		B (13.7)	B (13.0)	D/D
	-Southbound Left		B (10.1)	A (9.8)	D/D
6	**SR 92 (Spence Road) @ SiteOne South Driveway**	Stop Controlled on WB Approach			
	-Westbound Approach		B (13.6)	B (11.3)	D/D
	-Southbound Left		A (8.3)	A (8.3)	D/D
7	**SR 92 (Spence Road) @ Lees Lake Road / Lees Mill Road**	Stop Controlled on NB and SB Approaches			
	-Eastbound Left		A (8.1)	A (8.2)	D/D
	-Westbound Left		A (8.2)	A (8.6)	D/D
	-Northbound Approach		C (23.4)	D (27.3)	D/D
	-Southbound Approach		B (14.4)	C (22.9)	D/D

The results of the existing traffic operations analysis indicate that the approaches at the intersections along the SR 92 (Spence Road) corridor (intersections 4-7) are operating at a level of service "D" or better in the AM and PM peak hours. The three signalized study intersections along the SR 74 (Senoia Road) corridor (intersections 1-3) have multiple approaches operating at a level of service "E/F" with peak hour traffic. These intersection delays are intended to be addressed by the planned GDOT interchange project for I-85 at SR 74 (Project #0007841), which will improve the intersections of SR 74 at the I-85 northbound/southbound ramps, as well as widen SR 74 at its intersection to the south with Oakley Industrial Boulevard.

PROJECT DESCRIPTION

The proposed *Lofts at South Futlon* development will be located at 7995 Spence Road in the City of South Fulton, Georgia. The project site will be located to the southeast of I-85 off SR 92 (Spence Road). The development will consist of 842 apartment units in addition to 2,000 SF of commercial retail space.



The development proposes access at the following locations on SR 92 (Spence Road):

- Site Driveway 1: Full access driveway aligning with the existing northern SiteOne distribution center driveway
- Site Driveway 2: Right-in/right-out driveway to the north of Site Driveway 1

Site Plan

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

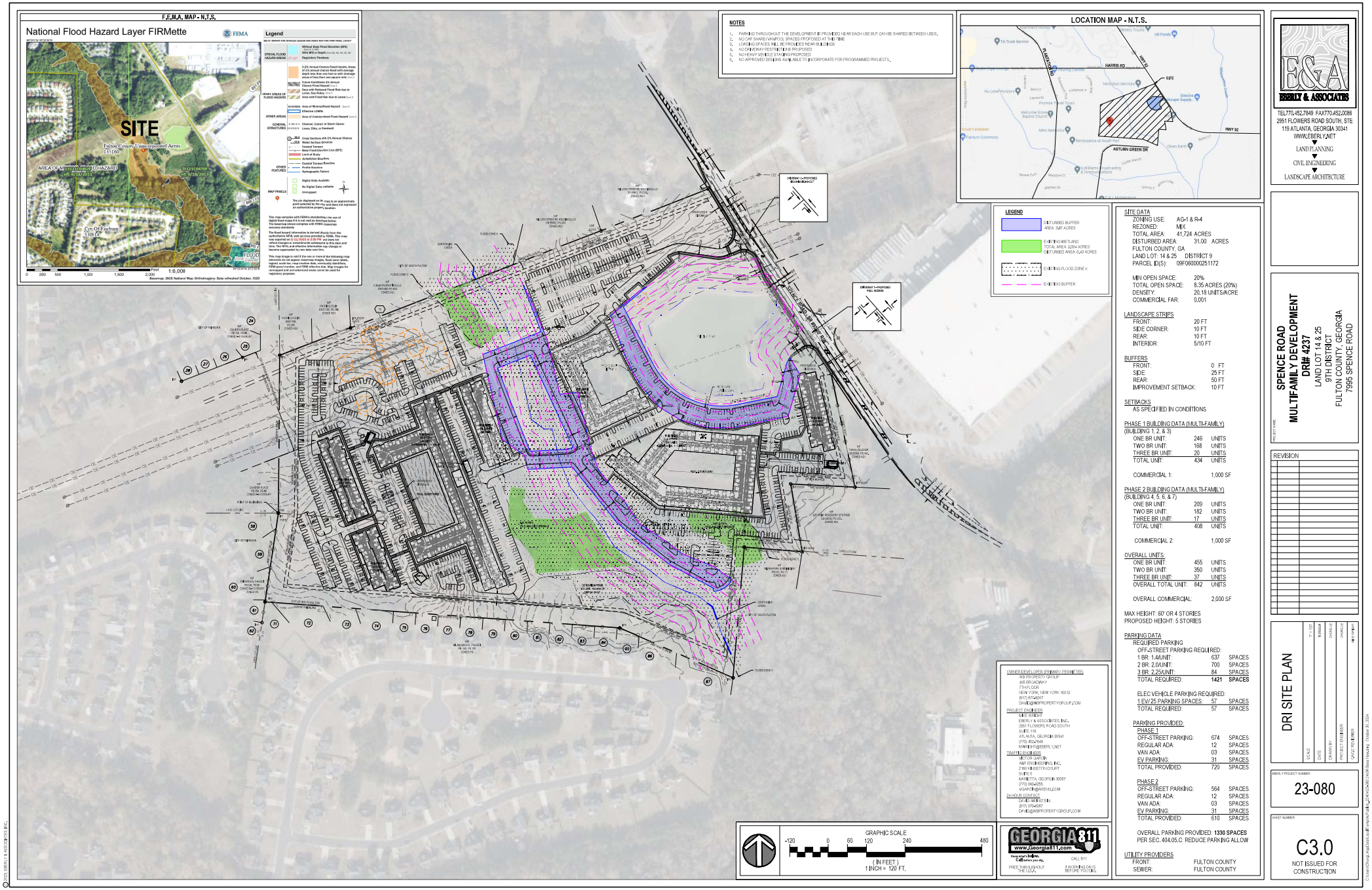


Figure 4 – Site Plan

Planned Bicycle and Pedestrian Facilities

Sidewalks are present on both sides of SR 92 (Spence Road) from the south of I-85 to The Parke at Oakley South Driveway / US Foods Truck Driveway, and the sidewalk on the east side extends to the US Foods southern employee driveway. No sidewalks are present on either side of SR 92 along the proposed site frontage. Internal sidewalks will be provided in the proposed development. No new pedestrian infrastructure outside the development is proposed, although a 6' sidewalk will be added to the western side of SR 92 along the site frontage.

Potential Pedestrian and Bicycle Destinations

Below are the potential pedestrian facilities within 0.25-mile proximity of the site:

- SiteOne Landscape Supply (Distribution Center)
- US Foods (Distribution Center)

Planned Transit Facilities

Bus stops for MARTA Route 188 are present along Oakley Industrial Boulevard within a ½ mile radius of the proposed development (to the north). No new transit facilities are proposed.

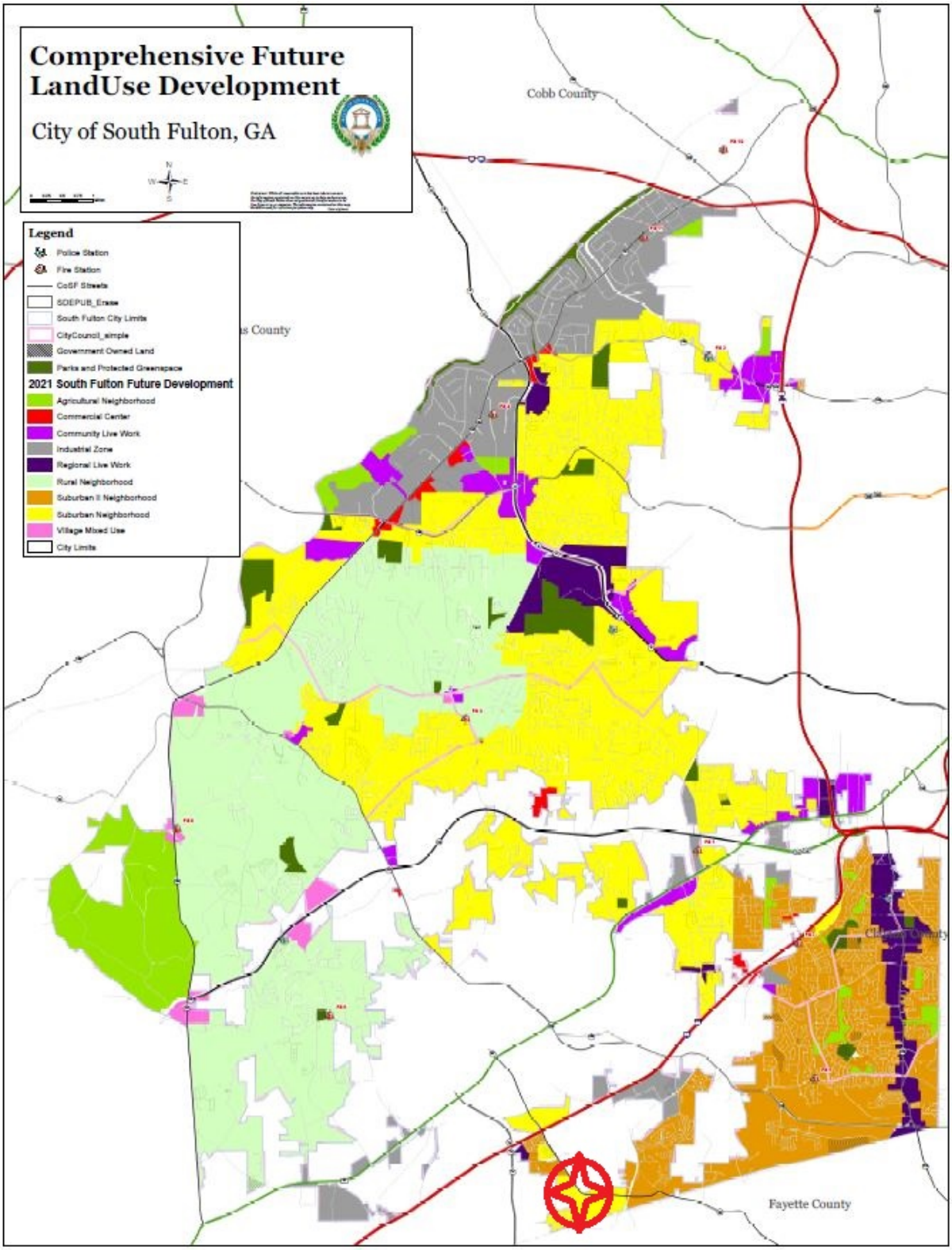
Consistency with Adopted Comprehensive Plan

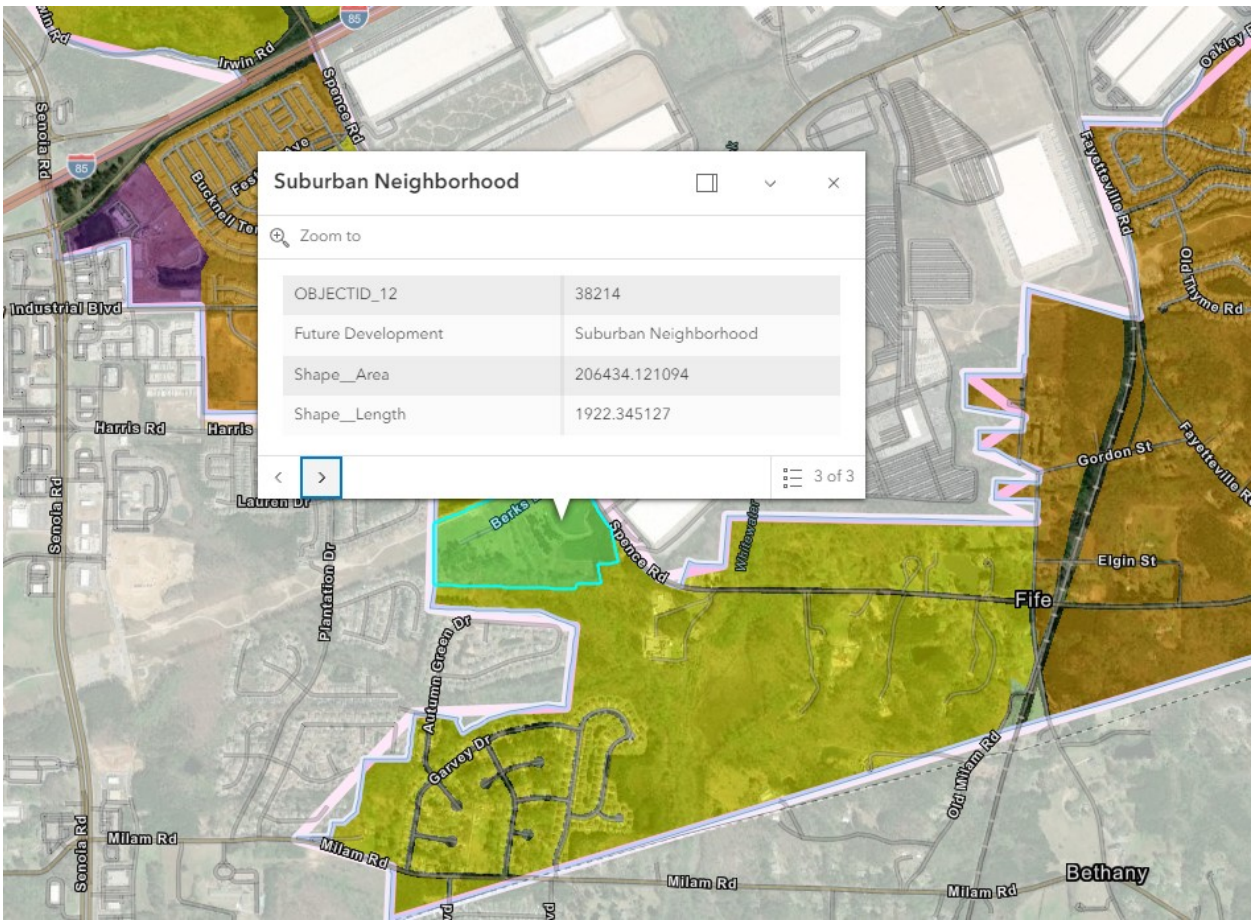
The proposed development will include an apartment complex with a total of 842 units and 2,000 SF of commercial (retail) space. The property includes 41.724 acres of land. The site zoning is currently split between AG-1 (Agricultural) and R-4 (Single Family Dwelling) and is requesting a rezoning to MIX (Mixed-Use).

Land Use and Zoning

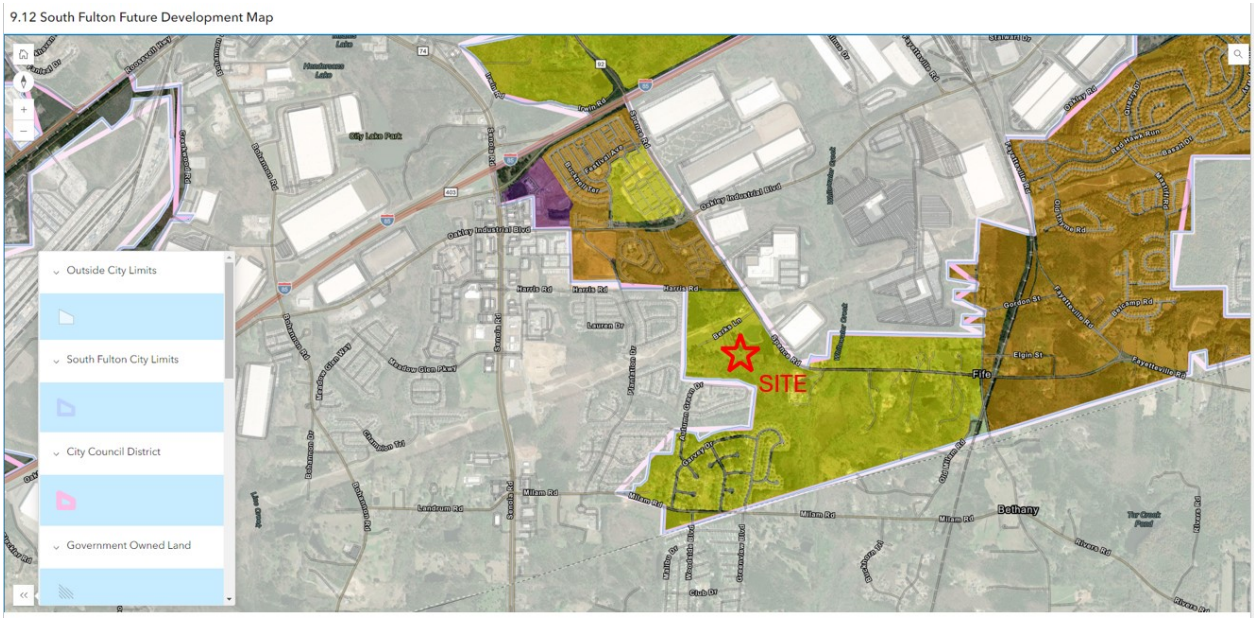
South Fulton Future Land Use Map	Suburban Neighborhood
City of South Fulton's Vision and Goals (2021 Comprehensive Plan)	**Vision:** *The City of South Fulton will be an innovative, diverse community that is safe, environmentally conscious, healthy, transparent and financially sustainable for all its citizens and visitors.* **Community Goals:** • *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*
Character Area	**Suburban Neighborhood:** *The Suburban Neighborhood Character Area intends to provide a wide diversity of housing types and affordability in the City of South Fulton while preserving the surrounding natural, agricultural, and rural areas. The area is further subdivided into two levels, Suburban I and Suburban II, which represent a transitional density from the less intense uses near rural areas to the more intensive suburban uses that are older and have a higher density. The Suburban Neighborhoods are located closest to urbanized areas and are comprised of medium-density residential housing. Included in this area are the communities of Sandtown, Cascade, Old National, and portions of Cliftondale. Public infrastructure is available. This Character Area has the highest percentage of existing developed land. Other types of development allowed in Suburban Neighborhood include civic uses such as schools, places of worship, community centers, and facilities. Within the Suburban II Neighborhood, Character mixed-use developments may be allowed to encourage redevelopment of older areas.*
Relation to Existing Land Use Plans	The proposed development is consistent with the vision and goals listed above.
Chattahoochee River/Metropolitan River Protection Act	N/A

Future Land Use/Development Maps





9.12 South Fulton Future Development Map



Project Phasing

This project has been evaluated for the complete build-out of the development in one phase in 2030.

Trip Generation

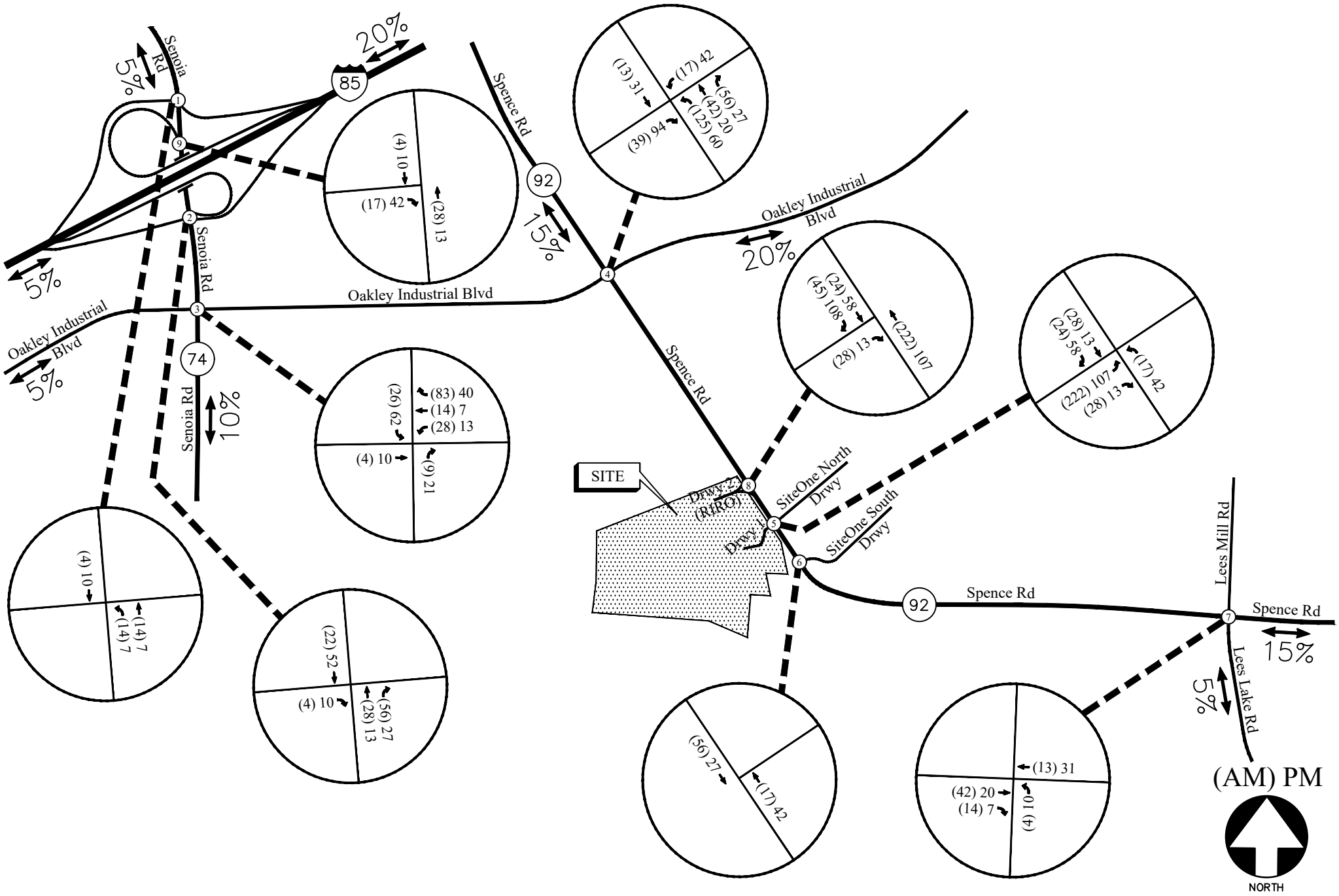
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE land uses: *221 – Multifamily Housing (Mid-Rise)* and *822 – Strip Retail Plaza (<40k)*. The calculated site-generated volumes for the proposed development are shown in Table 4.

TABLE 4 – TRIP GENERATION

Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	Two-Way
ITE 221 – Multifamily Housing (Mid-Rise)	842 Units	83	276	359	201	128	329	3,970
ITE 822 – Strip Retail Plaza (<40k)	2,000 SF	3	2	5	7	6	13	109
Total Site Trips		86	278	364	208	134	342	4,079

Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. Trip distribution for this site was based on the nature of the development, the locations of major roadways and highways that will serve this development, and a review of existing travel patterns in the study area. 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 5.



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

A&R Engineering Inc.

FUTURE 2030 TRAFFIC ANALYSIS

The future 2030 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" Condition

The "No-Build" (or background) condition provides an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, and factors in 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 due to the annual growth of traffic.

Annual Traffic Growth

To evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Based on a series of historic data (2018-2019, 2021-2023) from 5 GDOT traffic data stations near the proposed development location, a growth factor of 2.1% was calculated. A 2% growth factor was applied to the existing traffic volumes to estimate the future year traffic volumes prior to the addition of site-generated traffic.

Planned and Programmed Improvements in Study Area

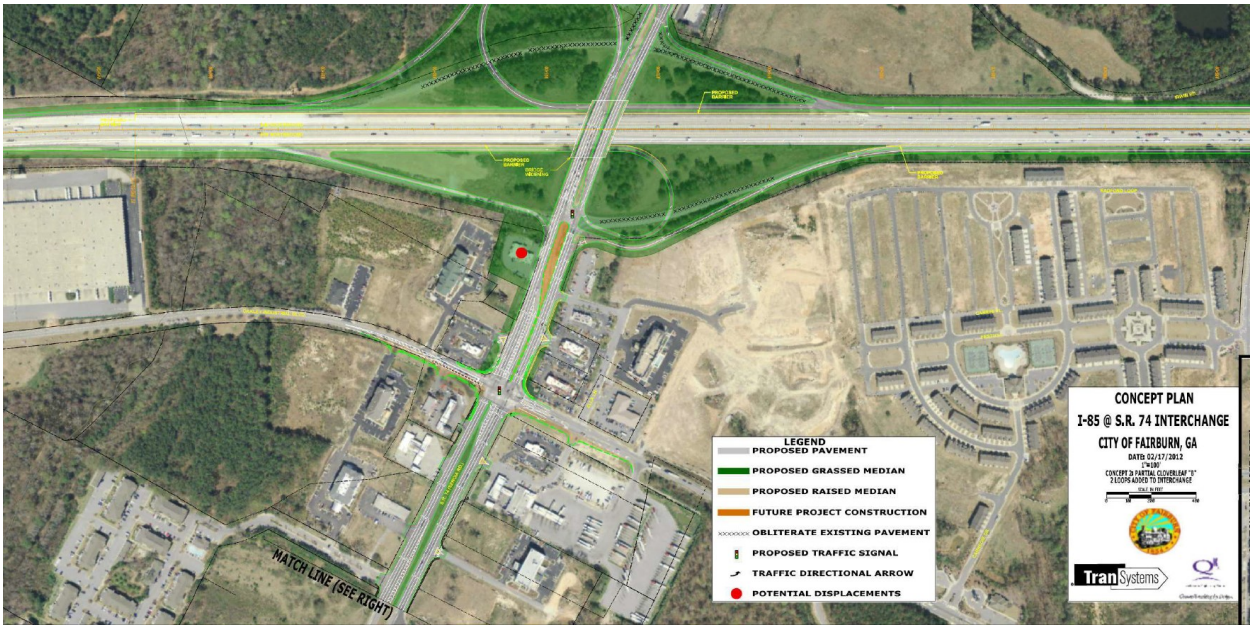
The following improvements have been identified in the Regional Transportation Plan (Plan 2040), GDOT GeoPi, and/or the local comprehensive transportation plan. These improvements are located within the vicinity of the proposed development.

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	I-85 at SR 74 (Senoia Road)	I-85 at SR 74 Interchange	GDOT/ Fairburn	0007841	FS-AR-182	2016	2019	2025
2	SR 74 FROM FAYETTE COUNTY LINE TO SR 14 (Resurfacing & Maintenance)	SR 14/US 29 at the northern termini and the Fayette County line at the southern project termini.	GDOT	M006471	N/A	N/A	N/A	2025

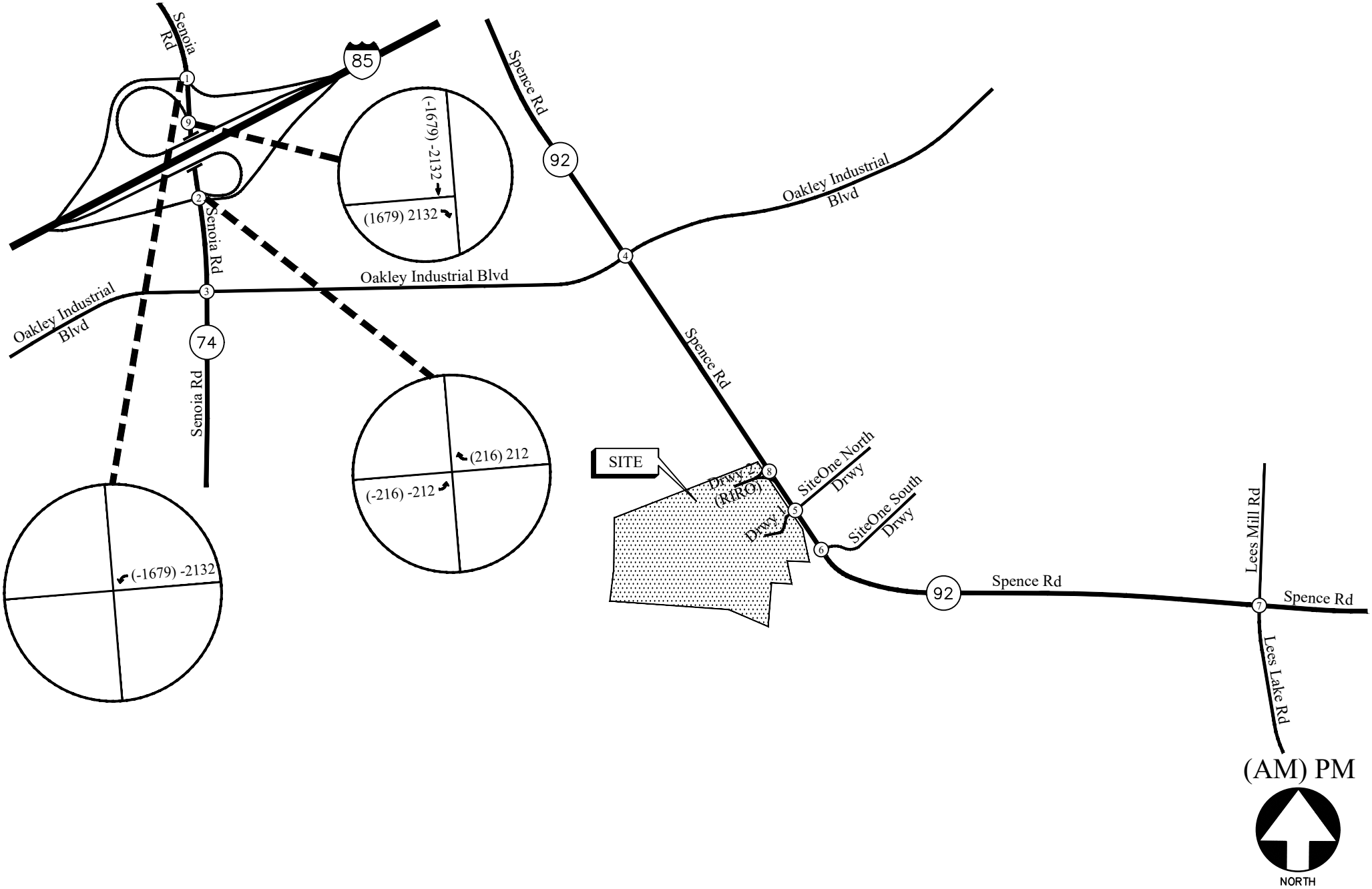
I-85 South Interchange Reconstruction (Project #0007841)

GDOT project #0007841 is a redesign and reconstruction project for the interchange of Interstate 85 and SR 74 (Senoia Road), with both the northbound and southbound ramp intersections with SR 74 being reconfigured to decrease traffic delays experienced during peak hours. The project will modify the SR 74 and I-85 interchange to a partial clover leaf with loop ramps for traffic leaving I-85. The project improvements will extend to the south on SR 74, with additional lanes being added to both the northbound and southbound approaches to ensure that traffic flow to/from the interchange is also optimized. Upon completion of the project, SR 74 will be an eight-lane roadway at its intersection with Oakley Industrial Boulevard, rather than a four-lane roadway as it is now. The project is scheduled to begin in late 2024 and construction is expected to conclude by the end of 2025. Since the reconstruction project will be completed before 2030, the above improvements were incorporated in both the "No-Build" and "Build" traffic operations analyses. The shifted left turn volumes from the existing ramps to SR 74 to the new loop ramps with right turn access are shown in Figure 6, and the resulting future "No-Build" volumes on the roadway that include the shifted volumes are shown in Figure 7.



Future "Build" Condition

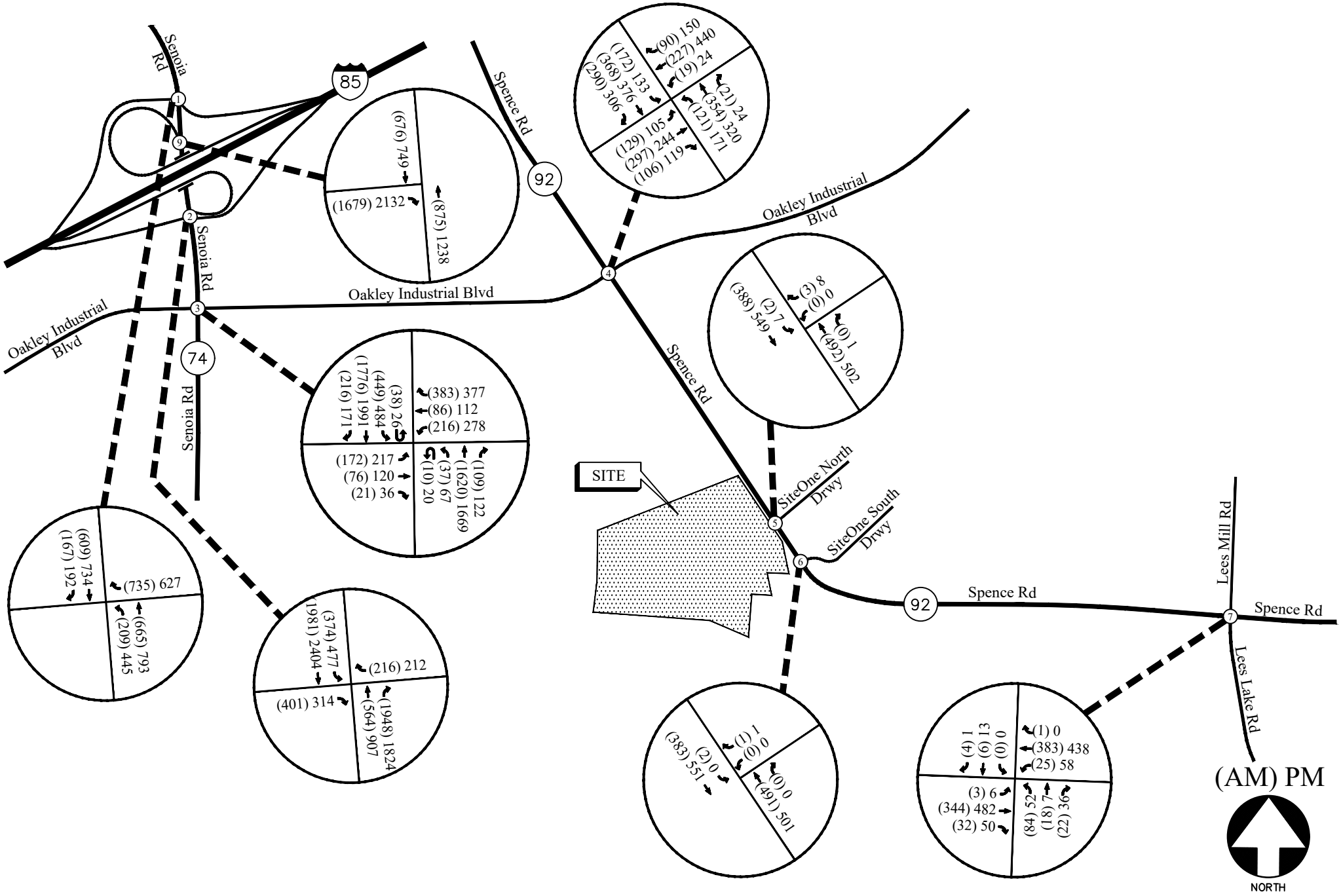
The "Build" or development condition includes the estimated background traffic from the "No-Build" conditions plus the traffic from the proposed development. To evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) were added to base traffic volumes (Figure 7) to calculate the future traffic volumes after the construction of the development. These total future "Build" traffic volumes are shown in Figure 8.



SHIFTED LEFT TURN VOLUMES DUE TO I-85/SR 74 INTERCHANGE PROJECT

FIGURE 6

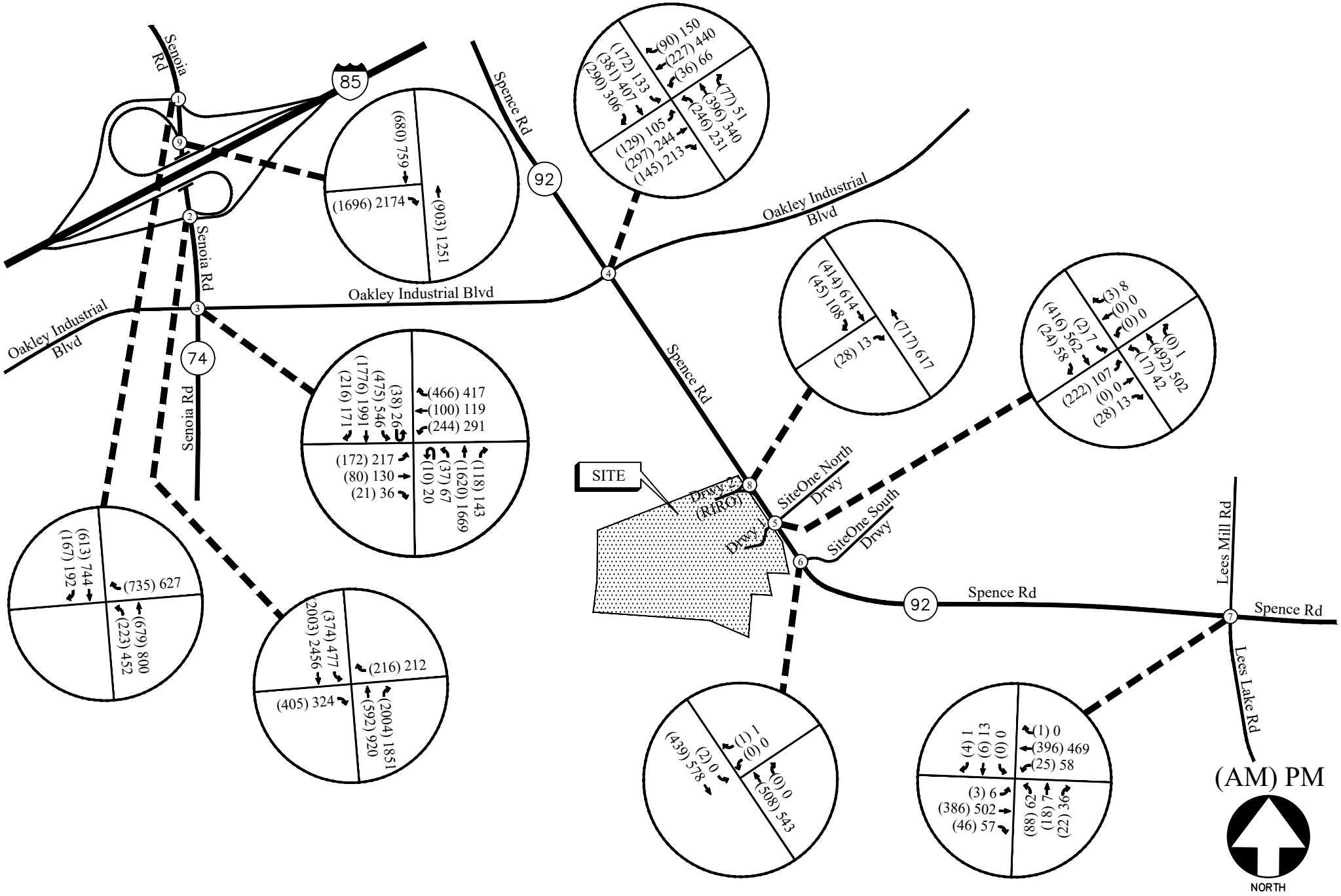
A&R Engineering Inc.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 7

A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 8

A&R Engineering Inc.

Auxiliary Lane Analysis

Included below are analyses for turn lanes for at the site driveways as per GDOT standards. The analyses below are based off the projected site volumes in the Trip Distribution section. According to the estimated ITE traffic generation volumes, the 24-hour two-way volume for traffic entering and exiting the site is 4,079 vehicles.

Left Turn Lane Analysis

For a two-lane roadway with an AADT greater than 6,000 vehicles and a posted speed limit of 45 mph, the daily site-generated traffic left turn movements threshold to warrant a turn lane is 175 left-turning vehicles a day. The projected daily left turn volume at site driveway 1 is shown in Table 6.

TABLE 6 – GDOT REQUIREMENTS FOR LEFT TURN LANES

Intersection	Left Turn Traffic (% total entering)	Left Turn Volume (vehicles/day)	Roadway Speed / # Lanes / ADT	GDOT Threshold (vehicles/ day)	Warrants Met?
SR 92 (Spence Road) @ SiteOne North Driveway / Site Driveway 1 (South)	20% (Northbound)	**408** (Total Trips) ÷ 2 × 0.2 = (4,079) ÷ 2 x 0.2 = 408	45 mph / 2-Lane / > 6,000	175	Yes

A left turn lane is warranted on SR 92 at Site Driveway 1.

Deceleration Turn Lane Analysis

For a two-lane roadway with an AADT greater than 6,000 vehicles and a posted speed limit of 45 mph, the daily site-generated traffic right turn movements threshold to warrant a deceleration lane is 75 right-turning vehicles a day. The projected daily right turn volumes at both site driveways are included in Table 7.

TABLE 7 – GDOT REQUIREMENTS FOR DECELERATION LANES

Intersection	Right Turn Traffic (% total entering)	Right Turn Volume (vehicles/day)	Roadway Speed / # Lanes / ADT	GDOT Threshold (vehicles/ day)	Warrants Met?
SR 92 (Spence Road) @ SiteOne North Driveway / Site Driveway 1 (South)	28% (Southbound)	**571** (Total Trips) ÷ 2 × 0.28 = (4,079) ÷ 2 x 0.28 = 571	45 mph / 2-Lane / > 6,000	75	Yes
SR 92 (Spence Road) @ Site Driveway 2 (North, Right-In/Right-Out)	52% (Southbound)	**1,061** (Total Trips) ÷ 2 × 0.52 = (4,079) ÷ 2 x 0.52 = 1,061	45 mph / 2-Lane / > 6,000	75	Yes

Right turn lanes are warranted at both proposed site driveways.

Future Traffic Operations

The future "No-Build" and "Build" traffic operations were analyzed using the volumes in Figures 7 and 8, respectively. The results of the future traffic operations analysis are shown below in Table 8. Recommendations for future traffic control and lane geometry are shown in Figure 9.

TABLE 8 – FUTURE INTERSECTION OPERATIONS

	Intersection	LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**SR 74 (Senoia Road) @ I-85 Southbound Ramps ***	**D (47.0)**	**D (47.9)**	**D (48.7)**	**D (50.0)**
	-Westbound Approach	E (60.6)	E (59.0)	E (60.6)	E (59.0)
	-Northbound Approach	C (29.2)	D (43.5)	C (34.3)	D (48.1)
	-Southbound Approach	D (54.0)	D (46.2)	D (54.2)	D (46.6)
2	**SR 74 (Senoia Road) @ I-85 Northbound Ramps ***	**C (31.1)**	**C (24.1)**	**C (31.9)**	**C (24.5)**
	-Eastbound Approach	D (51.2)	D (46.0)	D (52.2)	D (47.7)
	-Westbound Approach	C (30.5)	D (34.1)	C (30.5)	D (34.1)
	-Northbound Approach	D (39.4)	C (26.0)	D (40.0)	C (26.1)
	-Southbound Approach	B (19.0)	B (19.1)	B (19.8)	C (19.6)
3	**SR 74 (Senoia Road) @ Oakley Industrial Blvd**	**C (34.6)**	**D (38.2)**	**D (36.1)**	**D (39.7)**
	-Eastbound Approach	E (73.7)	E (66.2)	E (73.8)	E (66.4)
	-Westbound Approach	E (64.9)	E (68.8)	E (67.0)	E (74.5)
	-Northbound Approach	D (42.6)	D (41.6)	D (43.3)	D (42.2)
	-Southbound Approach	C (21.7)	C (28.0)	C (23.2)	C (29.6)
4	**SR 92 (Spence Road) @ Oakley Industrial Blvd**	**C (23.3)**	**C (26.1)**	**C (24.6)**	**C (27.6)**
	-Eastbound Approach	C (32.6)	C (26.8)	C (33.6)	C (27.9)
	-Westbound Approach	C (27.9)	C (26.8)	C (28.9)	C (27.8)
	-Northbound Approach	B (18.9)	C (23.8)	B (19.6)	C (24.5)
	-Southbound Approach	B (17.8)	C (27.3)	C (21.5)	C (30.4)
5	**SR 92 (Spence Road) @ SiteOne North Driveway / Site Driveway 1**				
	-Eastbound Approach	-	-	F (178.5)	F (105.9)
	-Westbound Approach	B (14.5)	B (13.8)	B (14.5)	B (13.8)
	-Northbound Left	-	-	A (8.4)	A (9.2)
	-Southbound Left	B (10.4)	B (10.1)	B (10.4)	B (10.1)
6	**SR 92 (Spence Road) @ SiteOne South Driveway**				
	-Westbound Approach	B (14.4)	B (11.8)	B (14.6)	B (12.2)
	-Southbound Left	A (8.5)	A (8.5)	A (8.6)	A (8.7)
7	**SR 92 (Spence Road) @ Lees Lake Road / Lees Mill Road**				
	-Eastbound Left	A (8.2)	A (8.3)	A (8.2)	A (8.4)
	-Westbound Left	A (8.4)	A (8.8)	A (8.6)	A (8.9)
	-Northbound Approach	D (31.1)	E (39.5)	E (39.1)	F (55.6)
	-Southbound Approach	C (16.1)	D (27.2)	C (17.2)	D (29.9)
8	**SR 92 (Spence Road) @ Site Driveway 2 (RIRO)**				
	-Eastbound Approach	-	-	B (11.2)	B (13.1)

* HCM 2000 results

The results of the future traffic operations analysis indicate that the approaches at the intersections along the SR 92 (Spence Road) corridor (intersections 4-7) will operate at a level of service "D" or better in the AM and PM peak hours, except for the eastbound (site driveway 1) approach at intersection 5 and the northbound (Lees Lake Road) approach at intersection 7, which will operate at a level of service "F" under the "Build" condition. These intersection delays are addressed in the following site mitigation improvement section. The three signalized study intersections along the SR 74 (Senoia Road) corridor (intersections 1-3) will operate at a satisfactory level of service "D" or better following the completion of the GDOT interchange redevelopment project for I-85 at SR 74 (Project #0007841).

Site Mitigation Improvement(s)

As shown in the Table 8 results, the main site driveway approach to the proposed development will operate at a level of service "F" in the AM and PM peak hours. It is not unusual for side streets that are stop sign controlled to experience elevated delays during peak hours due to the time gap required for vehicles to make turning movements on busy arterial roadways. A preliminary signal warrant analysis was conducted based on the projected future "Build" condition AM and PM peak hour volumes at intersection 5 to determine if a traffic signal serves as a suitable site mitigation improvement at site driveway 1. The signal warrant analysis used right turn reductions for the side street traffic volumes and accounted for two approach lanes for site driveway 1. The analysis results indicated that warrant 2 (four-hour vehicular warrant) will not be met but warrant 3 (peak hour warrant) will be satisfied. Warrant 1 (eight-hour vehicular warrant) could not be fully evaluated as only peak hour data from the study was available. It is therefore recommended that a full intersection control evaluation (ICE) study be conducted with 12-hour traffic counts from 7 AM to 7 PM to determine if a traffic signal will be warranted at the intersection of SR 92 and site driveway 1. The preliminary signal warrant analysis results are available in the appendix.

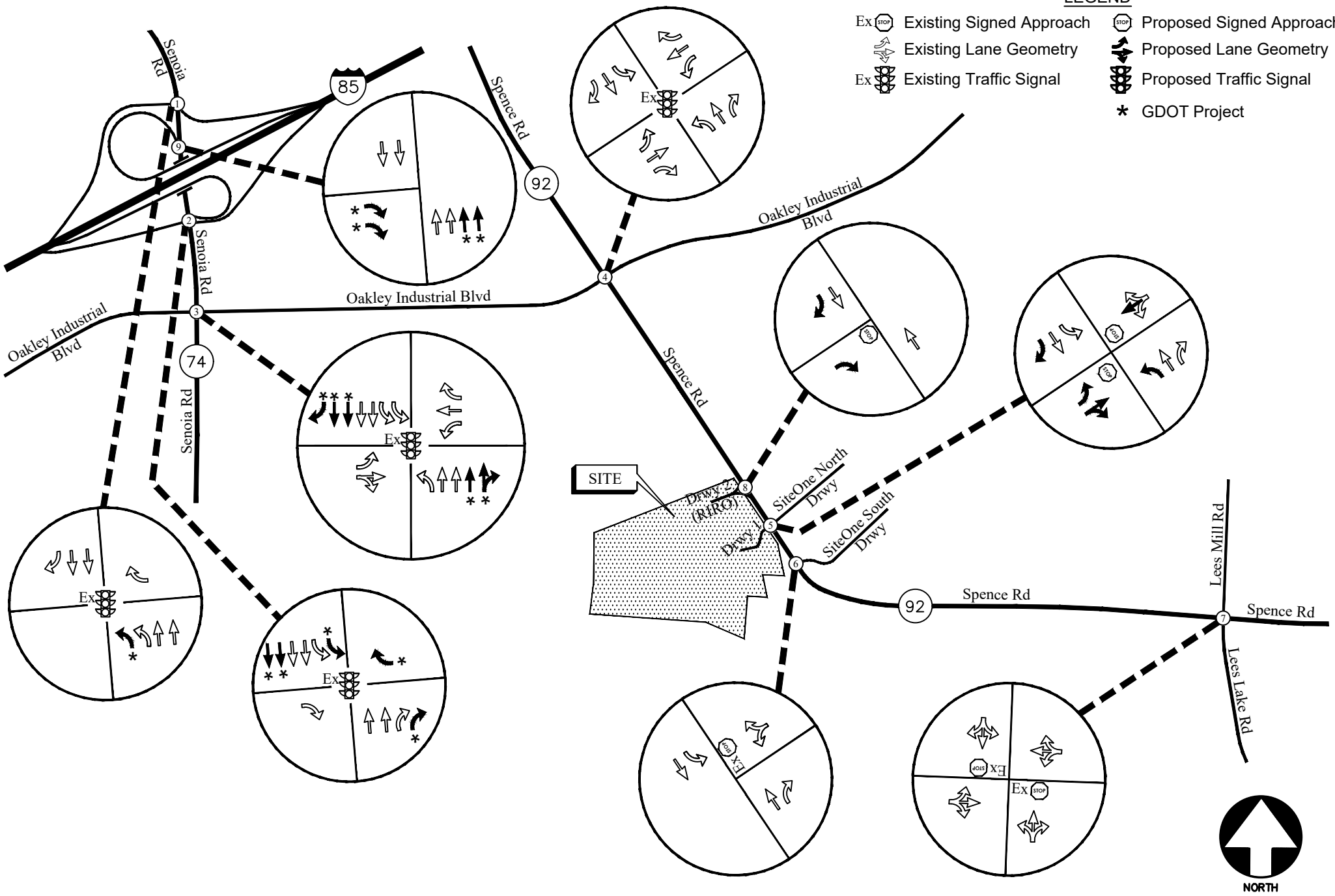
Table 9 shows the results of the comparison analysis for intersection 5 with and without a traffic signal.

TABLE 9 – FUTURE INTERSECTION OPERATIONS COMPARISON

Intersection		LOS (Delay): "Build" Condition			
		WITHOUT SIGNAL		WITH SIGNAL	
		AM Peak	PM Peak	AM Peak	PM Peak
5	**SR 92 (Spence Road) @ SiteOne North Driveway / Site Driveway 1 (South)**			**B (10.8)**	**A (5.9)**
	-Eastbound Approach	F (178.5)	F (105.9)	D (36.6)	D (41.1)
	-Westbound Approach	B (14.5)	B (13.8)	C (28.3)	D (35.9)
	-Northbound Left / Approach	A (8.4)	A (9.2)	A (8.2)	A (4.2)
	-Southbound Left / Approach	B (10.4)	B (10.1)	A (0.9)	A (0.9)

As shown in Table 9, the intersection will operate at an overall level of service "B" or better during the AM and PM peak hours with a traffic signal, and the minor street approaches will operate at a level of service "D" or better.

No site mitigation improvements were recommended for intersection 7, as explained in page E-2 of the executive summary.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 9

A&R Engineering Inc.

CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed *Lofts at South Fulton* residential development that will be located at 7995 Spence Road in the City of South Fulton, Georgia. The development will consist of 842 apartment units in addition to 2,000 SF of commercial retail space.

The development proposes access at the following locations on SR 92 (Spence Road):

- Site Driveway 1: Full access driveway aligning with the existing northern SiteOne distribution center driveway
- Site Driveway 2: Right-in/right-out driveway to the north of Site Driveway 1

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

1. SR 74 (Senoia Road) at I-85 Southbound Ramps
2. SR 74 (Senoia Road) at I-85 Northbound Ramps
3. SR 74 (Senoia Road) at Oakley Industrial Boulevard
4. SR 92 (Spence Road) at Oakley Industrial Boulevard
5. SR 92 (Spence Road) at SiteOne North Driveway / Site Driveway 1
6. SR 92 (Spence Road) at SiteOne South Driveway
7. SR 92 (Spence Road) at Lees Lake Road / Lees Mill Road
8. SR 92 (Spence Road) at Site Driveway 2 (Right-In/Right-Out)

The analysis included the evaluation of future operations for “No-Build” and “Build” conditions, both of which account for increases due to the annual growth of through traffic. The results of the future traffic operations analysis indicate that the approaches at the intersections along the SR 92 (Spence Road) corridor (intersections 4-7) will operate at a level of service “D” or better in the AM and PM peak hours, except for the eastbound (site driveway 1) approach at intersection 5 and the northbound (Lees Lake Road) approach at intersection 7, which will operate at a level of service “F” under the “Build” condition. These intersection delays are addressed in the site mitigation improvement section (page 29). The three signalized study intersections along the SR 74 (Senoia Road) corridor (intersections 1-3) will operate at a satisfactory level of service “D” or better following the completion of the GDOT interchange redevelopment project for I-85 at SR 74 (Project #0007841). Based on the analysis results, the proposed development will have minimal impact on traffic operations in the study network.

Recommended Site Mitigation Improvements

A preliminary signal warrant analysis was conducted based on the projected future "Build" condition AM and PM peak hour volumes at intersection 5 to determine if a traffic signal serves as a suitable site mitigation improvement at site driveway 1. The signal warrant analysis used right turn reductions for the side street traffic volumes and accounted for two approach lanes for site driveway 1. The analysis results indicated that warrant 2 (four-hour vehicular warrant) will not be met but warrant 3 (peak hour warrant) will be satisfied. Warrant 1 (eight-hour vehicular warrant) could not be fully evaluated as only peak hour data from the study was available. It is therefore recommended that a full intersection control evaluation (ICE) study be conducted with 12-hour traffic counts from 7 AM to 7 PM to determine if a traffic signal will be warranted at the intersection of SR 92 and site driveway 1. The preliminary signal warrant analysis results are available in the appendix.

Recommendations for Site Access Configuration

The following access configurations are recommended for the proposed site driveway intersections:

- Site Driveway 1: Full access driveway on SR 92 (Spence Road) aligning with the northern SiteOne distribution center driveway
    - One entering lane and two exiting lanes
    - A right turn lane and a left turn lane on SR 92 for entering traffic
    - Provide/confirm adequate sight distance per AASHTO standards
    - An intersection control evaluation (ICE) study should be conducted with 12-hour traffic counts (7 AM to 7 PM) to determine if a traffic signal will be warranted. If warrants are not met, conventional (minor stop) control should be used at the driveway.
- Site Driveway 2: Right-in/right-out driveway on SR 92 (Spence Road), north of Site Driveway 1
    - One entering lane and one exiting lane
    - Stop-sign controlled on the driveway approach with SR 92 remaining free flow
    - A right turn lane on SR 92 for entering traffic

Appendix

Existing Intersection Traffic Counts

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ I-85 SB Ramps
7-9 am | 4-6 pm

File Name : 20240339
Site Code : 20240339
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 74 (Senoia Road) Northbound				SR 74 (Senoia Road) Southbound				I-85 SB Ramps Eastbound				I-85 SB Ramps 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	45	122	0	167	0	143	40	183	0	0	0	0	290	0	127	417	767
07:15 AM	46	157	0	203	0	117	49	166	0	0	0	0	370	1	181	552	921
07:30 AM	52	185	0	237	0	152	35	187	0	0	0	0	397	0	179	576	1000
07:45 AM	48	143	0	191	0	141	33	174	0	0	0	0	399	0	169	568	933
Total	191	607	0	798	0	553	157	710	0	0	0	0	1456	1	656	2113	3621
08:00 AM	41	109	0	150	0	134	32	166	0	0	0	0	332	0	127	459	775
08:15 AM	40	108	0	148	0	130	17	147	0	0	0	0	274	0	81	355	650
08:30 AM	43	136	0	179	0	164	15	179	0	0	0	0	303	2	103	408	766
08:45 AM	44	132	0	176	0	122	15	137	0	0	0	0	264	0	90	354	667
Total	168	485	0	653	0	550	79	629	0	0	0	0	1173	2	401	1576	2858
*** BREAK ***																	
04:00 PM	63	144	0	207	0	195	67	262	0	0	0	0	414	0	111	525	994
04:15 PM	85	196	0	281	0	156	46	202	0	0	0	0	524	0	142	666	1149
04:30 PM	118	170	0	288	0	153	27	180	0	0	0	0	470	0	149	619	1087
04:45 PM	105	184	0	289	0	169	58	227	0	0	0	0	447	0	148	595	1111
Total	371	694	0	1065	0	673	198	871	0	0	0	0	1855	0	550	2405	4341
05:00 PM	89	158	0	247	0	177	40	217	0	0	0	0	463	0	121	584	1048
05:15 PM	84	140	0	224	0	174	62	236	0	0	0	0	452	0	113	565	1025
05:30 PM	99	197	0	296	0	167	39	206	0	0	0	0	435	1	133	569	1071
05:45 PM	78	162	0	240	0	165	38	203	0	0	0	0	472	0	122	594	1037
Total	350	657	0	1007	0	683	179	862	0	0	0	0	1822	1	489	2312	4181
Grand Total	1080	2443	0	3523	0	2459	613	3072	0	0	0	0	6306	4	2096	8406	15001
Apprch %	30.7	69.3	0		0	80	20		0	0	0		75	0	24.9		
Total %	7.2	16.3	0	23.5	0	16.4	4.1	20.5	0	0	0	0	42	0	14	56	
Cars & Buses	1003	2289	0	3292	0	2459	613	3072	0	0	0	0	5912	4	1675	7591	13955
% Cars & Buses	92.9	93.7	0	93.4	0	100	100	100	0	0	0	0	93.8	100	79.9	90.3	93
Trucks	77	154	0	231	0	0	0	0	0	0	0	0	394	0	421	815	1046
% Trucks	7.1	6.3	0	6.6	0	0	0	0	0	0	0	0	6.2	0	20.1	9.7	7

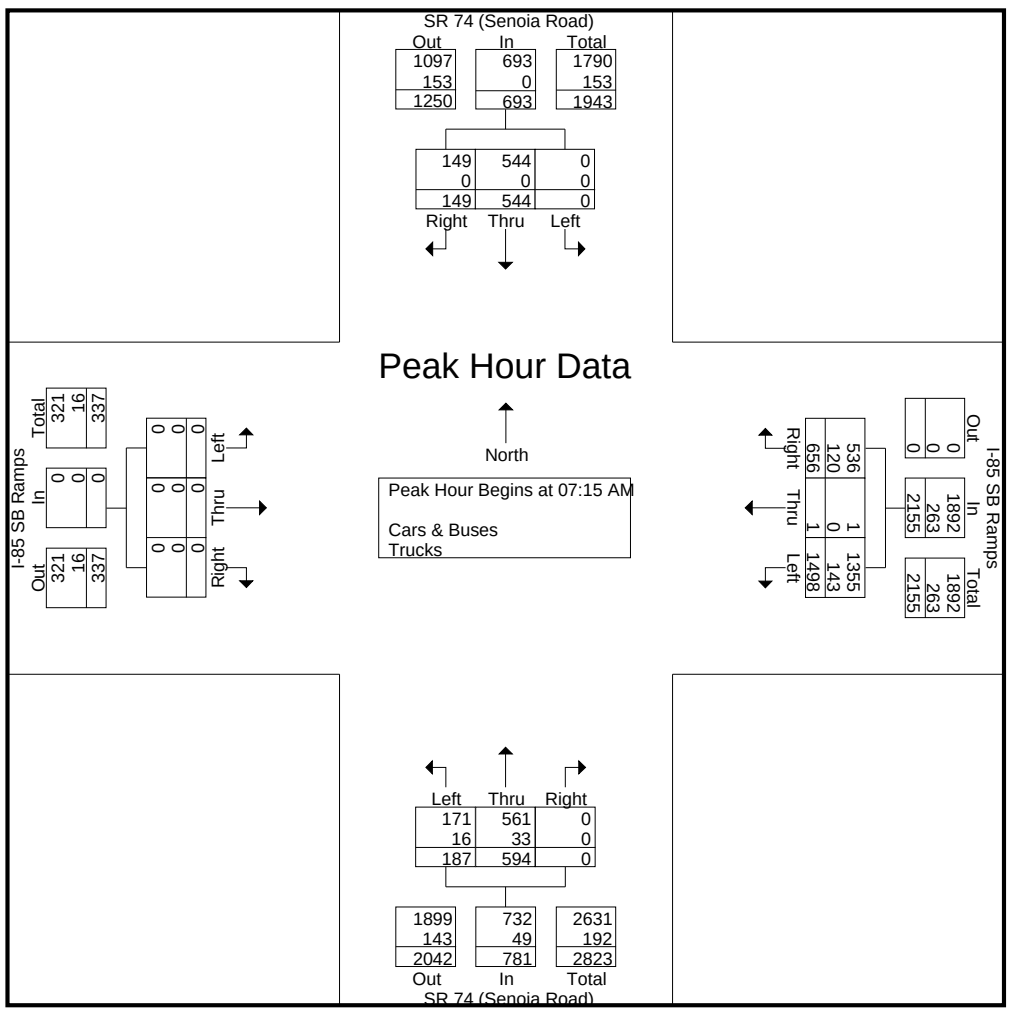
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ I-85 SB Ramps
7-9 am | 4-6 pm

File Name : 20240339
Site Code : 20240339
Start Date : 08-28-2024
Page No : 2

	SR 74 (Senoia Road) Northbound				SR 74 (Senoia Road) Southbound				I-85 SB Ramps Eastbound				I-85 SB Ramps 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 07:15 AM																	
07:15 AM	46	157	0	203	0	117	**49**	166	0	0	0	0	370	**1**	**181**	552	921
07:30 AM	**52**	**185**	0	**237**	0	**152**	35	**187**	0	0	0	0	397	0	179	**576**	**1000**
07:45 AM	48	143	0	191	0	141	33	174	0	0	0	0	**399**	0	169	568	933
08:00 AM	41	109	0	150	0	134	32	166	0	0	0	0	332	0	127	459	775
Total Volume	187	594	0	781	0	544	149	693	0	0	0	0	1498	1	656	2155	3629
% App. Total	23.9	76.1	0		0	78.5	21.5		0	0	0		69.5	0	30.4		
PHF	.899	.803	.000	.824	.000	.895	.760	.926	.000	.000	.000	.000	.939	.250	.906	.935	.907
Cars & Buses	171	561	0	732	0	544	149	693	0	0	0	0	1355	1	536	1892	3317
% Cars & Buses	91.4	94.4	0	93.7	0	100	100	100	0	0	0	0	90.5	100	81.7	87.8	91.4
Trucks	16	33	0	49	0	0	0	0	0	0	0	0	143	0	120	263	312
% Trucks	8.6	5.6	0	6.3	0	0	0	0	0	0	0	0	9.5	0	18.3	12.2	8.6



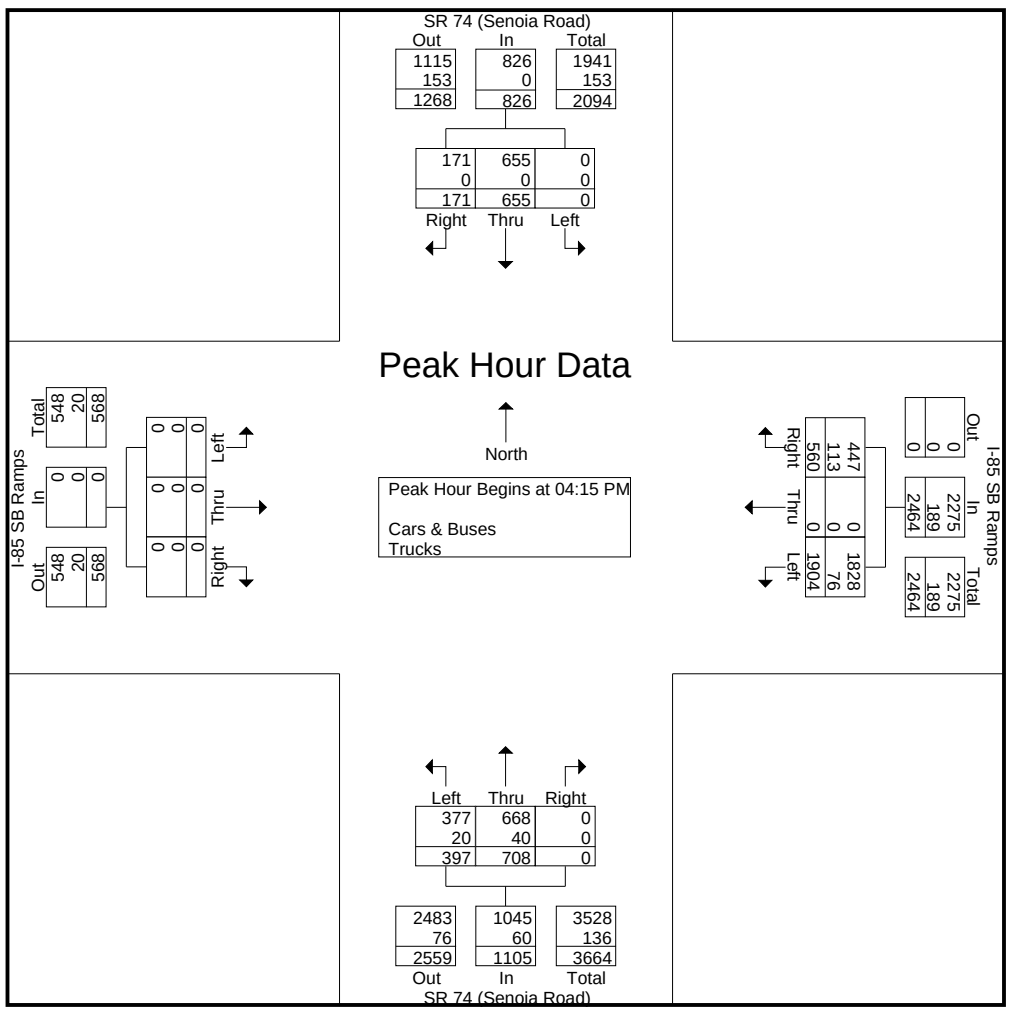
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ I-85 SB Ramps
7-9 am | 4-6 pm

File Name : 20240339
Site Code : 20240339
Start Date : 08-28-2024
Page No : 3

	SR 74 (Senoia Road) Northbound				SR 74 (Senoia Road) Southbound				I-85 SB Ramps Eastbound				I-85 SB Ramps 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 04:15 PM																	
04:15 PM	85	**196**	0	281	0	156	46	202	0	0	0	0	**524**	0	142	**666**	**1149**
04:30 PM	**118**	170	0	288	0	153	27	180	0	0	0	0	470	0	**149**	619	1087
04:45 PM	105	184	0	**289**	0	169	**58**	**227**	0	0	0	0	447	0	148	595	1111
05:00 PM	89	158	0	247	0	**177**	40	217	0	0	0	0	463	0	121	584	1048
Total Volume	397	708	0	1105	0	655	171	826	0	0	0	0	1904	0	560	2464	4395
% App. Total	35.9	64.1	0		0	79.3	20.7		0	0	0		77.3	0	22.7		
PHF	.841	.903	.000	.956	.000	.925	.737	.910	.000	.000	.000	.000	.908	.000	.940	.925	.956
Cars & Buses	377	668	0	1045	0	655	171	826	0	0	0	0	1828	0	447	2275	4146
% Cars & Buses	95.0	94.4	0	94.6	0	100	100	100	0	0	0	0	96.0	0	79.8	92.3	94.3
Trucks	20	40	0	60	0	0	0	0	0	0	0	0	76	0	113	189	249
% Trucks	5.0	5.6	0	5.4	0	0	0	0	0	0	0	0	4.0	0	20.2	7.7	5.7



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ I-85 NB Ramp
7-9 am | 4-6 pm

File Name : 20240338
Site Code : 20240338
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 74 (Senoia Road) Northbound				SR 74 (Senoia Road) Southbound				I-85 NB Ramp Eastbound				I-85 NB Ramp 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	0	101	383	484	103	368	0	471	41	0	49	90	0	0	0	0	1045
07:15 AM	0	106	382	488	119	364	0	483	51	0	69	120	0	0	0	0	1091
07:30 AM	0	144	491	635	95	453	0	548	50	0	79	129	0	0	0	0	1312
07:45 AM	0	158	481	639	77	465	0	542	76	0	93	169	0	0	0	0	1350
Total	0	509	1737	2246	394	1650	0	2044	218	0	290	508	0	0	0	0	4798
08:00 AM	0	109	412	521	95	402	0	497	35	0	76	111	0	0	0	0	1129
08:15 AM	0	93	355	448	67	449	0	516	32	0	110	142	0	0	0	0	1106
08:30 AM	0	119	406	525	84	429	0	513	32	0	72	104	0	0	0	0	1142
08:45 AM	0	132	404	536	90	383	0	473	31	0	75	106	0	0	0	0	1115
Total	0	453	1577	2030	336	1663	0	1999	130	0	333	463	0	0	0	0	4492
*** BREAK ***																	
04:00 PM	0	152	382	534	124	523	0	647	23	0	65	88	0	0	0	0	1269
04:15 PM	0	185	387	572	96	545	0	641	44	0	71	115	0	0	0	0	1328
04:30 PM	0	239	391	630	116	544	0	660	57	0	69	126	0	0	0	0	1416
04:45 PM	0	169	379	548	105	535	0	640	40	0	75	115	0	0	0	0	1303
Total	0	745	1539	2284	441	2147	0	2588	164	0	280	444	0	0	0	0	5316
05:00 PM	0	228	414	642	111	565	0	676	50	0	54	104	0	0	0	0	1422
05:15 PM	0	174	445	619	94	502	0	596	42	0	82	124	0	0	0	0	1339
05:30 PM	0	191	421	612	124	497	0	621	42	0	51	93	0	0	0	0	1326
05:45 PM	0	207	386	593	66	519	0	585	25	0	52	77	0	0	0	0	1255
Total	0	800	1666	2466	395	2083	0	2478	159	0	239	398	0	0	0	0	5342
Grand Total	0	2507	6519	9026	1566	7543	0	9109	671	0	1142	1813	0	0	0	0	19948
Apprch %	0	27.8	72.2		17.2	82.8	0		37	0	63		0	0	0		
Total %	0	12.6	32.7	45.2	7.9	37.8	0	45.7	3.4	0	5.7	9.1	0	0	0	0	
Cars & Buses	0	2507	6519	9026	1192	7028	0	8220	612	0	1047	1659	0	0	0	0	18905
% Cars & Buses	0	100	100	100	76.1	93.2	0	90.2	91.2	0	91.7	91.5	0	0	0	0	94.8
Trucks	0	0	0	0	374	515	0	889	59	0	95	154	0	0	0	0	1043
% Trucks	0	0	0	0	23.9	6.8	0	9.8	8.8	0	8.3	8.5	0	0	0	0	5.2

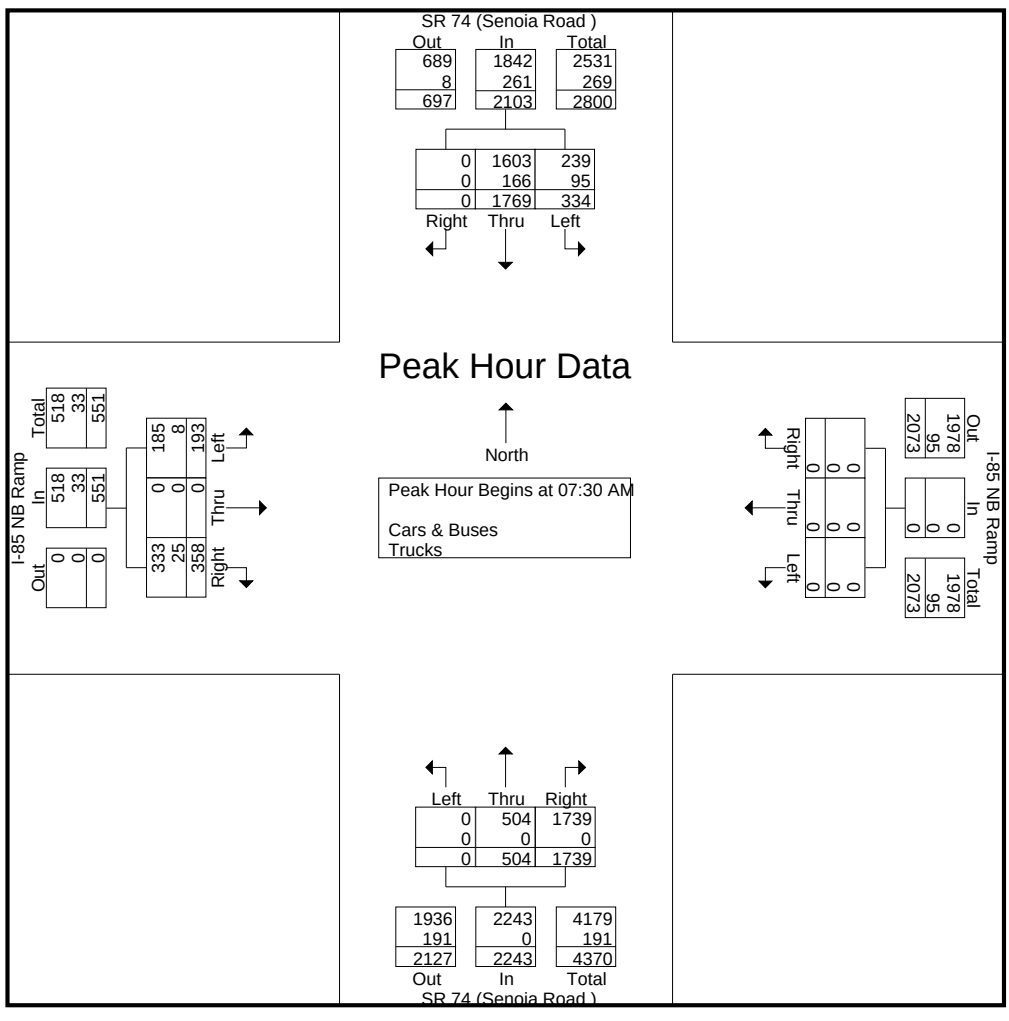
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ I-85 NB Ramp
7-9 am | 4-6 pm

File Name : 20240338
Site Code : 20240338
Start Date : 08-28-2024
Page No : 2

	SR 74 (Senoia Road) Northbound				SR 74 (Senoia Road) Southbound				I-85 NB Ramp Eastbound				I-85 NB Ramp 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	0	144	**491**	635	**95**	453	0	**548**	50	0	79	129	0	0	0	0	1312
07:45 AM	0	**158**	481	**639**	77	**465**	0	542	**76**	0	93	**169**	0	0	0	0	**1350**
08:00 AM	0	109	412	521	95	402	0	497	35	0	76	111	0	0	0	0	1129
08:15 AM	0	93	355	448	67	449	0	516	32	0	**110**	142	0	0	0	0	1106
Total Volume	0	504	1739	2243	334	1769	0	2103	193	0	358	551	0	0	0	0	4897
% App. Total	0	22.5	77.5		15.9	84.1	0		35	0	65		0	0	0		
PHF	.000	.797	.885	.878	.879	.951	.000	.959	.635	.000	.814	.815	.000	.000	.000	.000	.907
Cars & Buses	0	504	1739	2243	239	1603	0	1842	185	0	333	518	0	0	0	0	4603
% Cars & Buses	0	100	100	100	71.6	90.6	0	87.6	95.9	0	93.0	94.0	0	0	0	0	94.0
Trucks	0	0	0	0	95	166	0	261	8	0	25	33	0	0	0	0	294
% Trucks	0	0	0	0	28.4	9.4	0	12.4	4.1	0	7.0	6.0	0	0	0	0	6.0



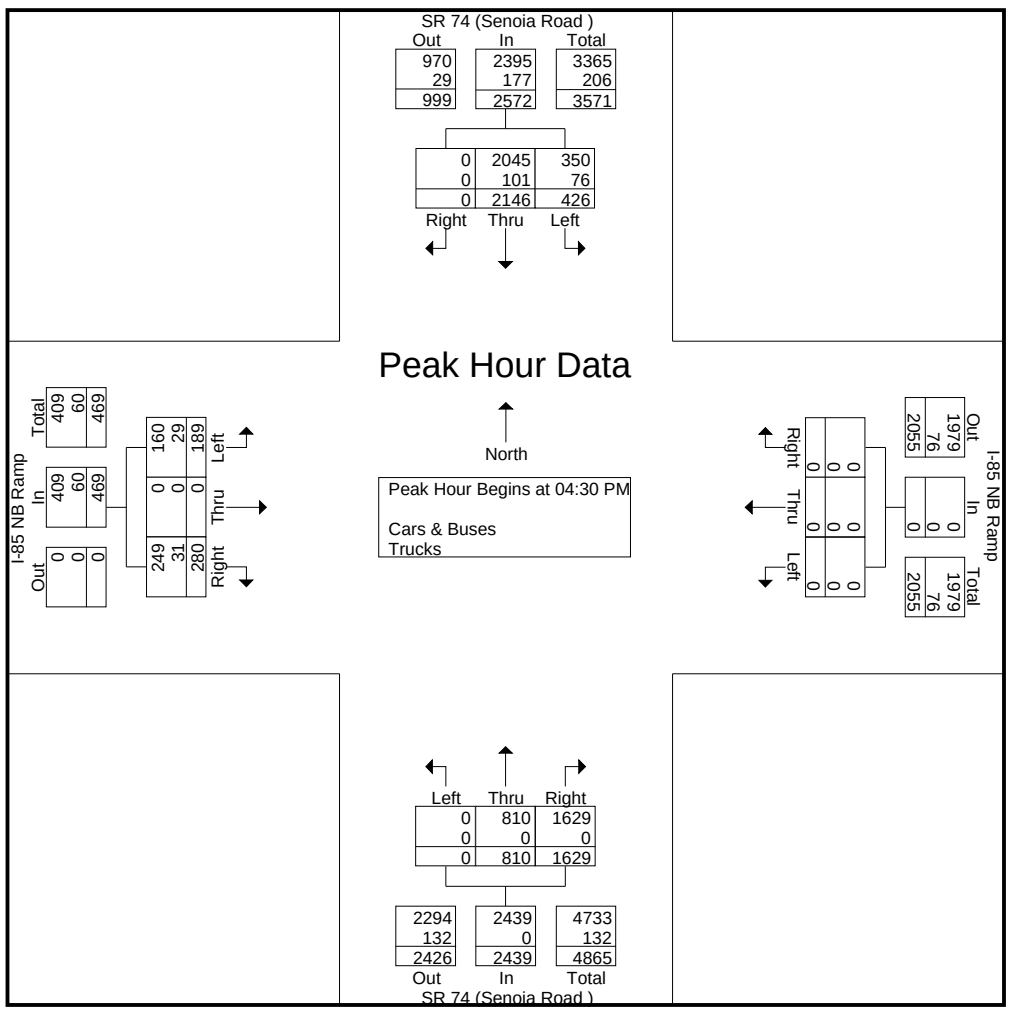
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ I-85 NB Ramp
7-9 am | 4-6 pm

File Name : 20240338
Site Code : 20240338
Start Date : 08-28-2024
Page No : 3

	SR 74 (Senoia Road) Northbound				SR 74 (Senoia Road) Southbound				I-85 NB Ramp Eastbound				I-85 NB Ramp 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 04:30 PM																	
04:30 PM	0	**239**	391	630	**116**	544	0	660	**57**	0	69	**126**	0	0	0	0	1416
04:45 PM	0	169	379	548	105	535	0	640	40	0	75	115	0	0	0	0	1303
05:00 PM	0	228	414	**642**	111	**565**	0	**676**	50	0	54	104	0	0	0	0	**1422**
05:15 PM	0	174	**445**	619	94	502	0	596	42	0	**82**	124	0	0	0	0	1339
Total Volume	0	810	1629	2439	426	2146	0	2572	189	0	280	469	0	0	0	0	5480
% App. Total	0	33.2	66.8		16.6	83.4	0		40.3	0	59.7		0	0	0		
PHF	.000	.847	.915	.950	.918	.950	.000	.951	.829	.000	.854	.931	.000	.000	.000	.000	.963
Cars & Buses	0	810	1629	2439	350	2045	0	2395	160	0	249	409	0	0	0	0	5243
% Cars & Buses	0	100	100	100	82.2	95.3	0	93.1	84.7	0	88.9	87.2	0	0	0	0	95.7
Trucks	0	0	0	0	76	101	0	177	29	0	31	60	0	0	0	0	237
% Trucks	0	0	0	0	17.8	4.7	0	6.9	15.3	0	11.1	12.8	0	0	0	0	4.3



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ Oakley Industrial Blvd
7-9 am | 4-6 pm

File Name : 20240340
Site Code : 20240340
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					Oakley Industrial Blvd Eastbound				Oakley Industrial Blvd Westbound				
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	331	20	1	353	79	258	49	4	390	42	11	4	57	33	8	69	110	910
07:15 AM	8	341	25	0	374	71	298	41	11	421	56	21	4	81	26	6	100	132	1008
07:30 AM	4	366	25	0	395	72	405	41	11	529	39	12	7	58	41	14	100	155	1137
07:45 AM	5	368	25	1	399	117	422	45	9	593	37	18	3	58	52	23	117	192	1242
Total	18	1406	95	2	1521	339	1383	176	35	1933	174	62	18	254	152	51	386	589	4297
08:00 AM	12	379	25	6	422	106	389	71	4	570	39	22	2	63	47	20	54	121	1176
08:15 AM	12	333	22	2	369	106	370	36	10	522	39	16	7	62	53	20	71	144	1097
08:30 AM	11	329	18	2	360	113	410	53	11	587	35	14	3	52	45	21	71	137	1136
08:45 AM	9	357	19	0	385	80	340	22	7	449	40	20	5	65	47	14	53	114	1013
Total	44	1398	84	10	1536	405	1509	182	32	2128	153	72	17	242	192	75	249	516	4422
*** BREAK ***																			
04:00 PM	11	357	42	6	416	92	410	58	0	560	47	30	1	78	42	26	75	143	1197
04:15 PM	8	325	25	4	362	87	425	65	0	577	47	28	8	83	73	46	108	227	1249
04:30 PM	9	355	18	4	386	108	427	49	5	589	37	24	4	65	57	49	96	202	1242
04:45 PM	7	349	18	1	375	92	438	53	0	583	50	17	5	72	33	38	66	137	1167
Total	35	1386	103	15	1539	379	1700	225	5	2309	181	99	18	298	205	159	345	709	4855
05:00 PM	21	383	27	5	436	115	438	47	12	612	38	29	8	75	69	36	70	175	1298
05:15 PM	6	338	30	5	379	110	433	33	7	583	58	30	5	93	57	13	76	146	1201
05:30 PM	12	375	17	2	406	124	455	33	4	616	49	26	16	91	64	22	112	198	1311
05:45 PM	21	394	35	6	456	83	452	40	0	575	49	22	3	74	58	29	79	166	1271
Total	60	1490	109	18	1677	432	1778	153	23	2386	194	107	32	333	248	100	337	685	5081
Grand Total	157	5680	391	45	6273	1555	6370	736	95	8756	702	340	85	1127	797	385	1317	2499	18655
Apprch %	2.5	90.5	6.2	0.7		17.8	72.8	8.4	1.1		62.3	30.2	7.5		31.9	15.4	52.7		
Total %	0.8	30.4	2.1	0.2	33.6	8.3	34.1	3.9	0.5	46.9	3.8	1.8	0.5	6	4.3	2.1	7.1	13.4	
Cars & Buses	128	5370	349	42	5889	1307	6091	593	95	8086	563	305	76	944	779	352	1169	2300	17219
% Cars & Buses	81.5	94.5	89.3	93.3	93.9	84.1	95.6	80.6	100	92.3	80.2	89.7	89.4	83.8	97.7	91.4	88.8	92	92.3
Trucks	29	310	42	3	384	248	279	143	0	670	139	35	9	183	18	33	148	199	1436
% Trucks	18.5	5.5	10.7	6.7	6.1	15.9	4.4	19.4	0	7.7	19.8	10.3	10.6	16.2	2.3	8.6	11.2	8	7.7

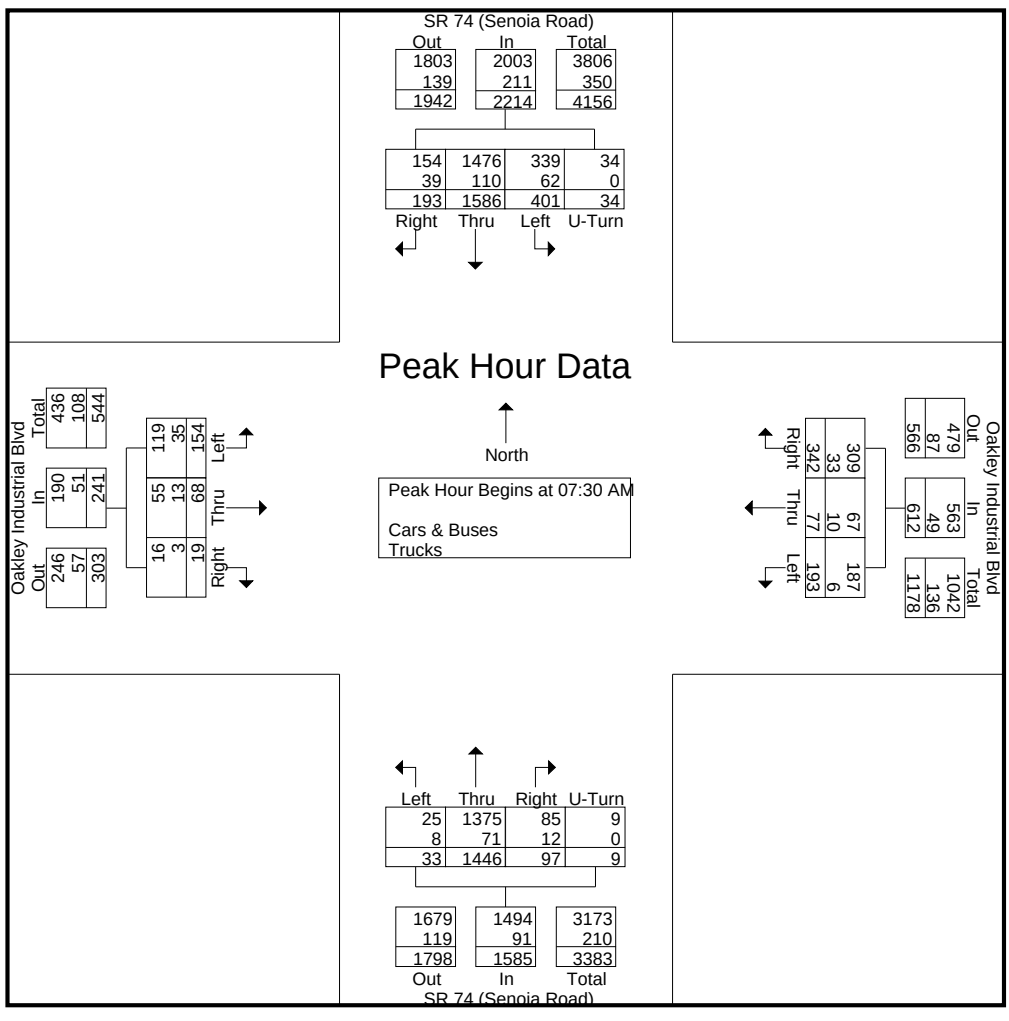
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ Oakley Industrial Blvd
7-9 am | 4-6 pm

File Name : 20240340
Site Code : 20240340
Start Date : 08-28-2024
Page No : 2

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					Oakley Industrial Blvd Eastbound				Oakley Industrial Blvd Westbound				
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	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	4	366	**25**	0	395	72	405	41	**11**	529	**39**	12	**7**	58	41	14	100	155	1137
07:45 AM	5	368	25	1	399	**117**	**422**	45	9	**593**	37	18	3	58	52	**23**	**117**	**192**	**1242**
08:00 AM	**12**	**379**	25	**6**	**422**	106	389	**71**	4	570	39	**22**	2	**63**	47	20	54	121	1176
08:15 AM	12	333	22	2	369	106	370	36	10	522	39	16	7	62	**53**	20	71	144	1097
Total Volume	33	1446	97	9	1585	401	1586	193	34	2214	154	68	19	241	193	77	342	612	4652
% App. Total	2.1	91.2	6.1	0.6		18.1	71.6	8.7	1.5		63.9	28.2	7.9		31.5	12.6	55.9		
PHF	.688	.954	.970	.375	.939	.857	.940	.680	.773	.933	.987	.773	.679	.956	.910	.837	.731	.797	.936
Cars & Buses	25	1375	85	9	1494	339	1476	154	34	2003	119	55	16	190	187	67	309	563	4250
% Cars & Buses	75.8	95.1	87.6	100	94.3	84.5	93.1	79.8	100	90.5	77.3	80.9	84.2	78.8	96.9	87.0	90.4	92.0	91.4
Trucks	8	71	12	0	91	62	110	39	0	211	35	13	3	51	6	10	33	49	402
% Trucks	24.2	4.9	12.4	0	5.7	15.5	6.9	20.2	0	9.5	22.7	19.1	15.8	21.2	3.1	13.0	9.6	8.0	8.6



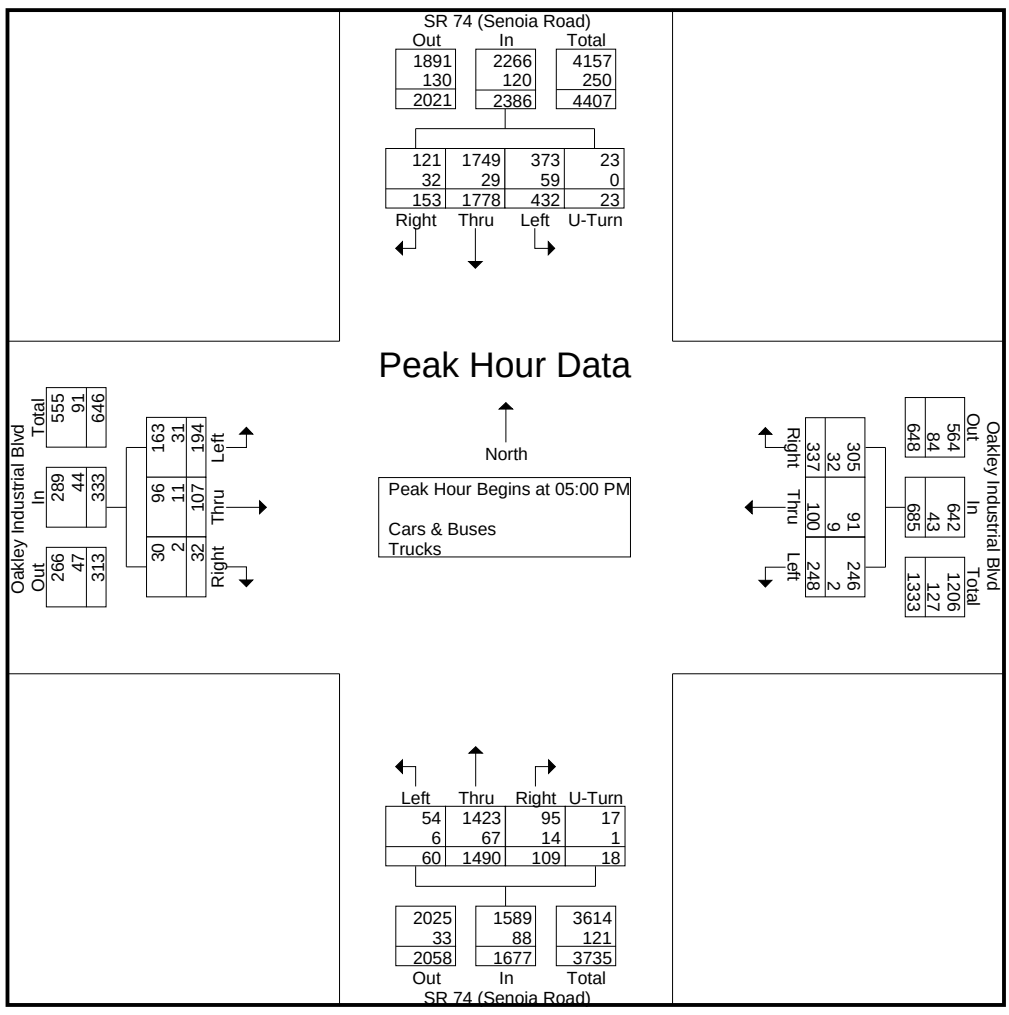
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 74 (Senoia Road) @ Oakley Industrial Blvd
7-9 am | 4-6 pm

File Name : 20240340
Site Code : 20240340
Start Date : 08-28-2024
Page No : 3

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					Oakley Industrial Blvd Eastbound				Oakley Industrial Blvd Westbound				
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	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 05:00 PM																			
05:00 PM	**21**	383	27	5	436	115	438	**47**	**12**	612	38	29	8	75	**69**	**36**	70	175	1298
05:15 PM	6	338	30	5	379	110	433	33	7	583	**58**	**30**	5	**93**	57	13	76	146	1201
05:30 PM	12	375	17	2	406	**124**	**455**	33	4	**616**	49	26	**16**	91	64	22	**112**	**198**	**1311**
05:45 PM	21	**394**	**35**	**6**	**456**	83	452	40	0	575	49	22	3	74	58	29	79	166	1271
Total Volume	60	1490	109	18	1677	432	1778	153	23	2386	194	107	32	333	248	100	337	685	5081
% App. Total	3.6	88.8	6.5	1.1		18.1	74.5	6.4	1		58.3	32.1	9.6		36.2	14.6	49.2		
PHF	.714	.945	.779	.750	.919	.871	.977	.814	.479	.968	.836	.892	.500	.895	.899	.694	.752	.865	.969
Cars & Buses	54	1423	95	17	1589	373	1749	121	23	2266	163	96	30	289	246	91	305	642	4786
% Cars & Buses	90.0	95.5	87.2	94.4	94.8	86.3	98.4	79.1	100	95.0	84.0	89.7	93.8	86.8	99.2	91.0	90.5	93.7	94.2
Trucks	6	67	14	1	88	59	29	32	0	120	31	11	2	44	2	9	32	43	295
% Trucks	10.0	4.5	12.8	5.6	5.2	13.7	1.6	20.9	0	5.0	16.0	10.3	6.3	13.2	0.8	9.0	9.5	6.3	5.8



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Oakley Industrial Blvd
7-9 am | 4-6 pm

File Name : 20240341
Site Code : 20240241
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Oakley Industrial Blvd Eastbound				Oakley Industrial Blvd 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	25	67	8	100	20	50	33	103	20	45	17	82	3	44	7	54	339
07:15 AM	31	72	6	109	36	67	54	157	30	79	24	133	5	58	18	81	480
07:30 AM	29	103	5	137	30	79	65	174	28	57	20	105	5	50	23	78	494
07:45 AM	26	84	7	117	54	112	74	240	37	77	26	140	4	50	25	79	576
Total	111	326	26	463	140	308	226	674	115	258	87	460	17	202	73	292	1889
08:00 AM	22	57	1	80	34	71	66	171	20	52	25	97	3	45	14	62	410
08:15 AM	36	41	6	83	22	49	39	110	22	65	28	115	2	43	16	61	369
08:30 AM	32	41	0	73	30	64	51	145	15	33	29	77	3	47	7	57	352
08:45 AM	22	29	5	56	19	58	33	110	26	51	27	104	2	37	9	48	318
Total	112	168	12	292	105	242	189	536	83	201	109	393	10	172	46	228	1449
*** BREAK ***																	
04:00 PM	40	77	6	123	33	85	85	203	26	56	26	108	3	100	37	140	574
04:15 PM	41	80	7	128	30	88	75	193	28	64	25	117	6	118	35	159	597
04:30 PM	31	69	4	104	36	86	45	167	20	55	20	95	6	99	32	137	503
04:45 PM	41	60	4	105	20	77	68	165	20	43	35	98	6	76	30	112	480
Total	153	286	21	460	119	336	273	728	94	218	106	418	21	393	134	548	2154
05:00 PM	40	60	4	104	33	80	69	182	23	52	28	103	5	88	28	121	510
05:15 PM	42	92	4	138	29	123	61	213	34	54	29	117	3	77	29	109	577
05:30 PM	40	79	4	123	21	100	54	175	27	58	27	112	8	74	22	104	514
05:45 PM	31	53	3	87	14	58	55	127	26	51	25	102	3	62	21	86	402
Total	153	284	15	452	97	361	239	697	110	215	109	434	19	301	100	420	2003
Grand Total	529	1064	74	1667	461	1247	927	2635	402	892	411	1705	67	1068	353	1488	7495
Apprch %	31.7	63.8	4.4		17.5	47.3	35.2		23.6	52.3	24.1		4.5	71.8	23.7		
Total %	7.1	14.2	1	22.2	6.2	16.6	12.4	35.2	5.4	11.9	5.5	22.7	0.9	14.2	4.7	19.9	
Cars & Buses	497	1055	60	1612	447	1235	893	2575	374	807	355	1536	56	999	343	1398	7121
% Cars & Buses	94	99.2	81.1	96.7	97	99	96.3	97.7	93	90.5	86.4	90.1	83.6	93.5	97.2	94	95
Trucks	32	9	14	55	14	12	34	60	28	85	56	169	11	69	10	90	374
% Trucks	6	0.8	18.9	3.3	3	1	3.7	2.3	7	9.5	13.6	9.9	16.4	6.5	2.8	6	5

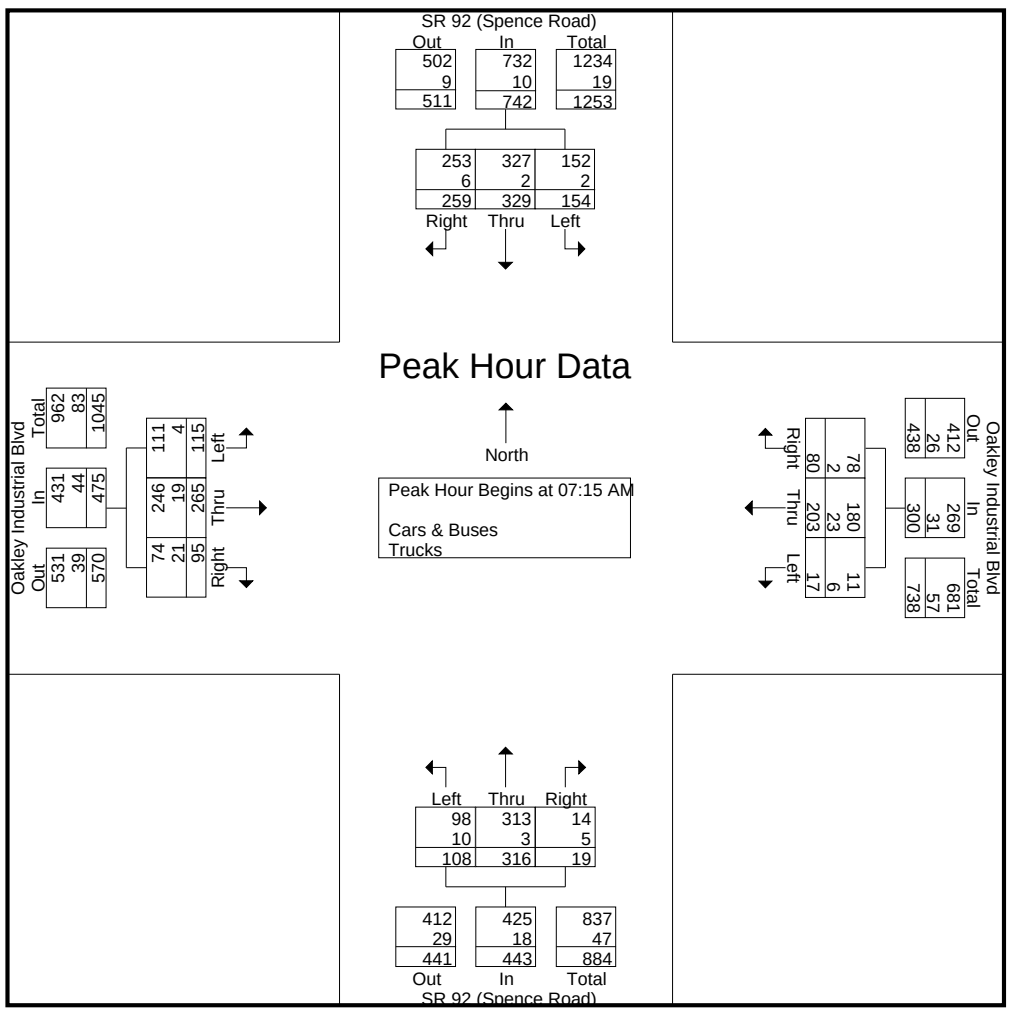
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Oakley Industrial Blvd
7-9 am | 4-6 pm

File Name : 20240341
Site Code : 20240241
Start Date : 08-28-2024
Page No : 2

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Oakley Industrial Blvd Eastbound				Oakley Industrial Blvd 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 07:15 AM																	
07:15 AM	**31**	72	6	109	36	67	54	157	30	**79**	24	133	**5**	**58**	18	**81**	480
07:30 AM	29	**103**	5	**137**	30	79	65	174	28	57	20	105	5	50	23	78	494
07:45 AM	26	84	**7**	117	**54**	**112**	**74**	**240**	**37**	77	**26**	**140**	4	50	**25**	79	**576**
08:00 AM	22	57	1	80	34	71	66	171	20	52	25	97	3	45	14	62	410
Total Volume	108	316	19	443	154	329	259	742	115	265	95	475	17	203	80	300	1960
% App. Total	24.4	71.3	4.3		20.8	44.3	34.9		24.2	55.8	20		5.7	67.7	26.7		
PHF	.871	.767	.679	.808	.713	.734	.875	.773	.777	.839	.913	.848	.850	.875	.800	.926	.851
Cars & Buses	98	313	14	425	152	327	253	732	111	246	74	431	11	180	78	269	1857
% Cars & Buses	90.7	99.1	73.7	95.9	98.7	99.4	97.7	98.7	96.5	92.8	77.9	90.7	64.7	88.7	97.5	89.7	94.7
Trucks	10	3	5	18	2	2	6	10	4	19	21	44	6	23	2	31	103
% Trucks	9.3	0.9	26.3	4.1	1.3	0.6	2.3	1.3	3.5	7.2	22.1	9.3	35.3	11.3	2.5	10.3	5.3



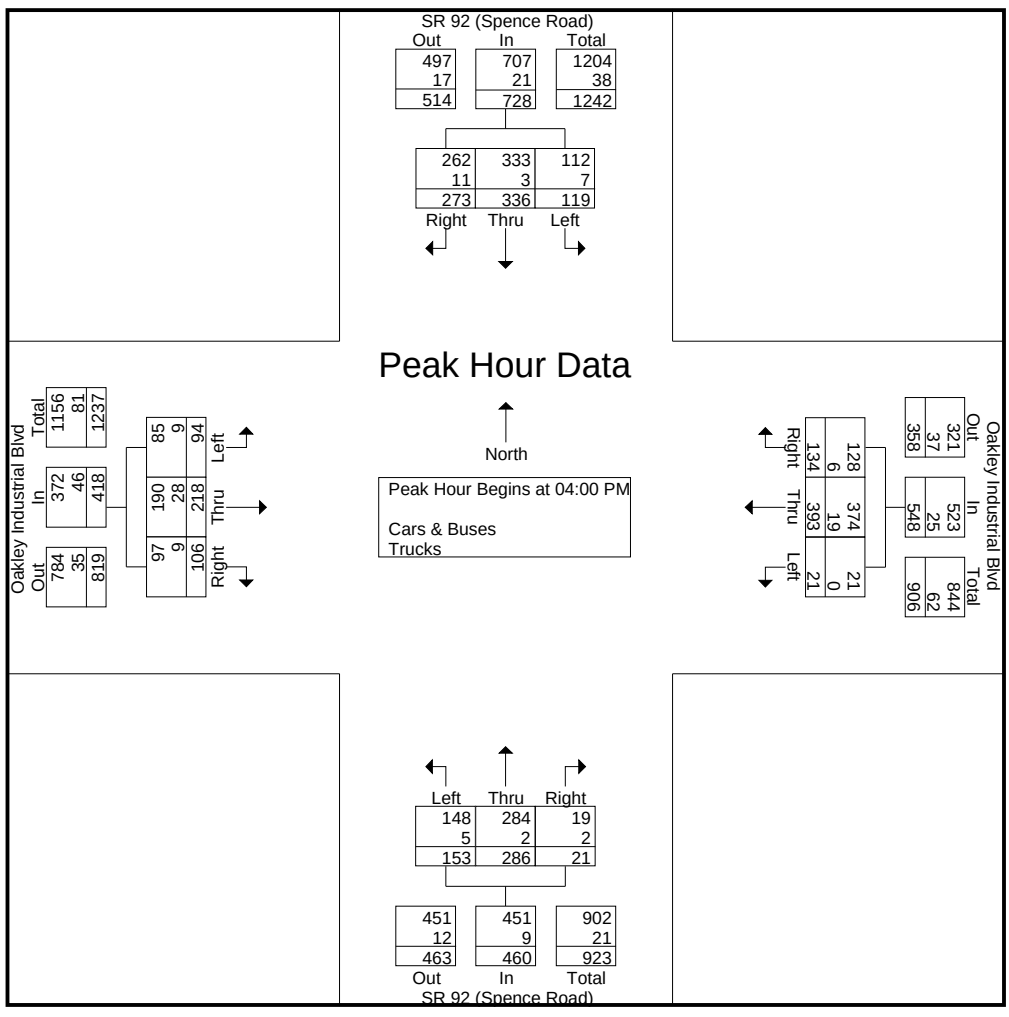
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Oakley Industrial Blvd
7-9 am | 4-6 pm

File Name : 20240341
Site Code : 20240241
Start Date : 08-28-2024
Page No : 3

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Oakley Industrial Blvd Eastbound				Oakley Industrial Blvd 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 04:00 PM																	
04:00 PM	40	77	6	123	33	85	**85**	**203**	26	56	26	108	3	100	**37**	140	574
04:15 PM	**41**	**80**	**7**	**128**	30	**88**	75	193	**28**	**64**	25	**117**	**6**	**118**	35	**159**	**597**
04:30 PM	31	69	4	104	**36**	86	45	167	20	55	20	95	6	99	32	137	503
04:45 PM	41	60	4	105	20	77	68	165	20	43	**35**	98	6	76	30	112	480
Total Volume	153	286	21	460	119	336	273	728	94	218	106	418	21	393	134	548	2154
% App. Total	33.3	62.2	4.6		16.3	46.2	37.5		22.5	52.2	25.4		3.8	71.7	24.5		
PHF	.933	.894	.750	.898	.826	.955	.803	.897	.839	.852	.757	.893	.875	.833	.905	.862	.902
Cars & Buses	148	284	19	451	112	333	262	707	85	190	97	372	21	374	128	523	2053
% Cars & Buses	96.7	99.3	90.5	98.0	94.1	99.1	96.0	97.1	90.4	87.2	91.5	89.0	100	95.2	95.5	95.4	95.3
Trucks	5	2	2	9	7	3	11	21	9	28	9	46	0	19	6	25	101
% Trucks	3.3	0.7	9.5	2.0	5.9	0.9	4.0	2.9	9.6	12.8	8.5	11.0	0	4.8	4.5	4.6	4.7



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Site One Northern Driveway
7-9 am | 4-6 pm

File Name : 20240342
Site Code : 20240342
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Eastbound				Site One Northern Driveway 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	0	87	0	87	1	67	0	68	0	0	0	0	0	0	1	1	156
07:15 AM	0	101	0	101	0	74	0	74	0	0	0	0	0	0	0	0	175
07:30 AM	0	127	0	127	1	96	0	97	0	0	0	0	0	0	1	1	225
07:45 AM	0	112	0	112	1	80	0	81	0	0	0	0	0	0	0	0	193
Total	0	427	0	427	3	317	0	320	0	0	0	0	0	0	2	2	749
08:00 AM	0	99	0	99	0	96	0	96	0	0	0	0	0	0	2	2	197
08:15 AM	0	72	0	72	2	81	0	83	0	0	0	0	0	0	0	0	155
08:30 AM	0	68	0	68	1	68	0	69	0	0	0	0	0	0	0	0	137
08:45 AM	0	45	0	45	2	72	0	74	0	0	0	0	0	0	2	2	121
Total	0	284	0	284	5	317	0	322	0	0	0	0	0	0	4	4	610
*** BREAK ***																	
04:00 PM	0	115	0	115	1	116	0	117	0	0	0	0	0	0	1	1	233
04:15 PM	0	118	0	118	1	104	0	105	0	0	0	0	0	0	2	2	225
04:30 PM	0	99	0	99	1	103	0	104	0	0	0	0	0	0	1	1	204
04:45 PM	0	97	1	98	1	129	0	130	0	0	0	0	0	0	1	1	229
Total	0	429	1	430	4	452	0	456	0	0	0	0	0	0	5	5	891
05:00 PM	0	88	0	88	3	125	0	128	0	0	0	0	0	0	1	1	217
05:15 PM	0	144	0	144	2	116	0	118	0	0	0	0	0	0	4	4	266
05:30 PM	0	119	0	119	0	120	0	120	0	0	0	0	0	0	1	1	240
05:45 PM	0	99	0	99	0	92	0	92	0	0	0	0	0	0	1	1	192
Total	0	450	0	450	5	453	0	458	0	0	0	0	0	0	7	7	915
Grand Total	0	1590	1	1591	17	1539	0	1556	0	0	0	0	0	0	18	18	3165
Apprch %	0	99.9	0.1		1.1	98.9	0		0	0	0		0	0	100		
Total %	0	50.2	0	50.3	0.5	48.6	0	49.2	0	0	0	0	0	0	0.6	0.6	
Cars & Buses	0	1561	0	1561	2	1520	0	1522	0	0	0	0	0	0	3	3	3086
% Cars & Buses	0	98.2	0	98.1	11.8	98.8	0	97.8	0	0	0	0	0	0	16.7	16.7	97.5
Trucks	0	29	1	30	15	19	0	34	0	0	0	0	0	0	15	15	79
% Trucks	0	1.8	100	1.9	88.2	1.2	0	2.2	0	0	0	0	0	0	83.3	83.3	2.5

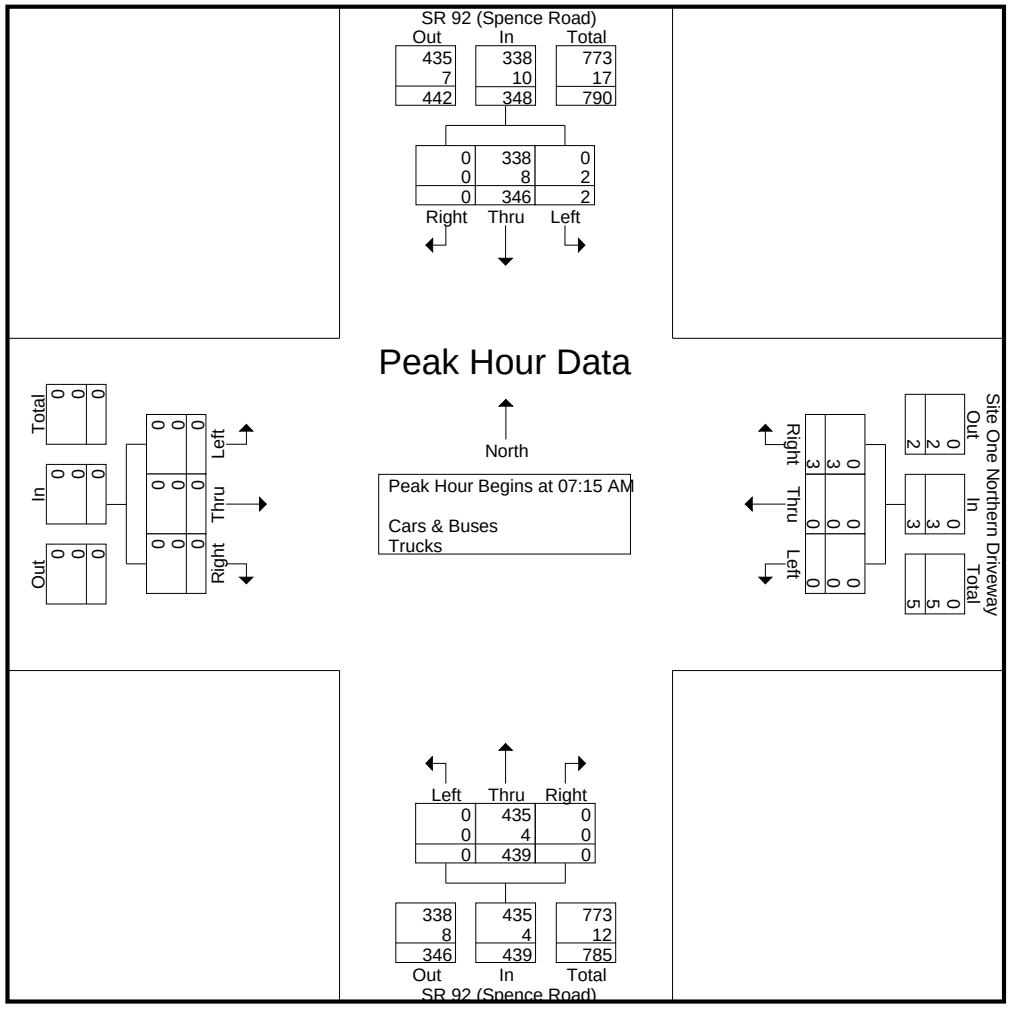
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Site One Northern Driveway
7-9 am | 4-6 pm

File Name : 20240342
Site Code : 20240342
Start Date : 08-28-2024
Page No : 2

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Eastbound				Site One Northern Driveway 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 07:15 AM																	
07:15 AM	0	101	0	101	0	74	0	74	0	0	0	0	0	0	0	0	175
07:30 AM	0	**127**	0	**127**	**1**	**96**	0	**97**	0	0	0	0	0	0	1	1	**225**
07:45 AM	0	112	0	112	1	80	0	81	0	0	0	0	0	0	0	0	193
08:00 AM	0	99	0	99	0	96	0	96	0	0	0	0	0	0	**2**	**2**	197
Total Volume	0	439	0	439	2	346	0	348	0	0	0	0	0	0	3	3	790
% App. Total	0	100	0		0.6	99.4	0		0	0	0		0	0	100		
PHF	.000	.864	.000	.864	.500	.901	.000	.897	.000	.000	.000	.000	.000	.000	.375	.375	.878
Cars & Buses	0	435	0	435	0	338	0	338	0	0	0	0	0	0	0	0	773
% Cars & Buses	0	99.1	0	99.1	0	97.7	0	97.1	0	0	0	0	0	0	0	0	97.8
Trucks	0	4	0	4	2	8	0	10	0	0	0	0	0	0	3	3	17
% Trucks	0	0.9	0	0.9	100	2.3	0	2.9	0	0	0	0	0	0	100	100	2.2



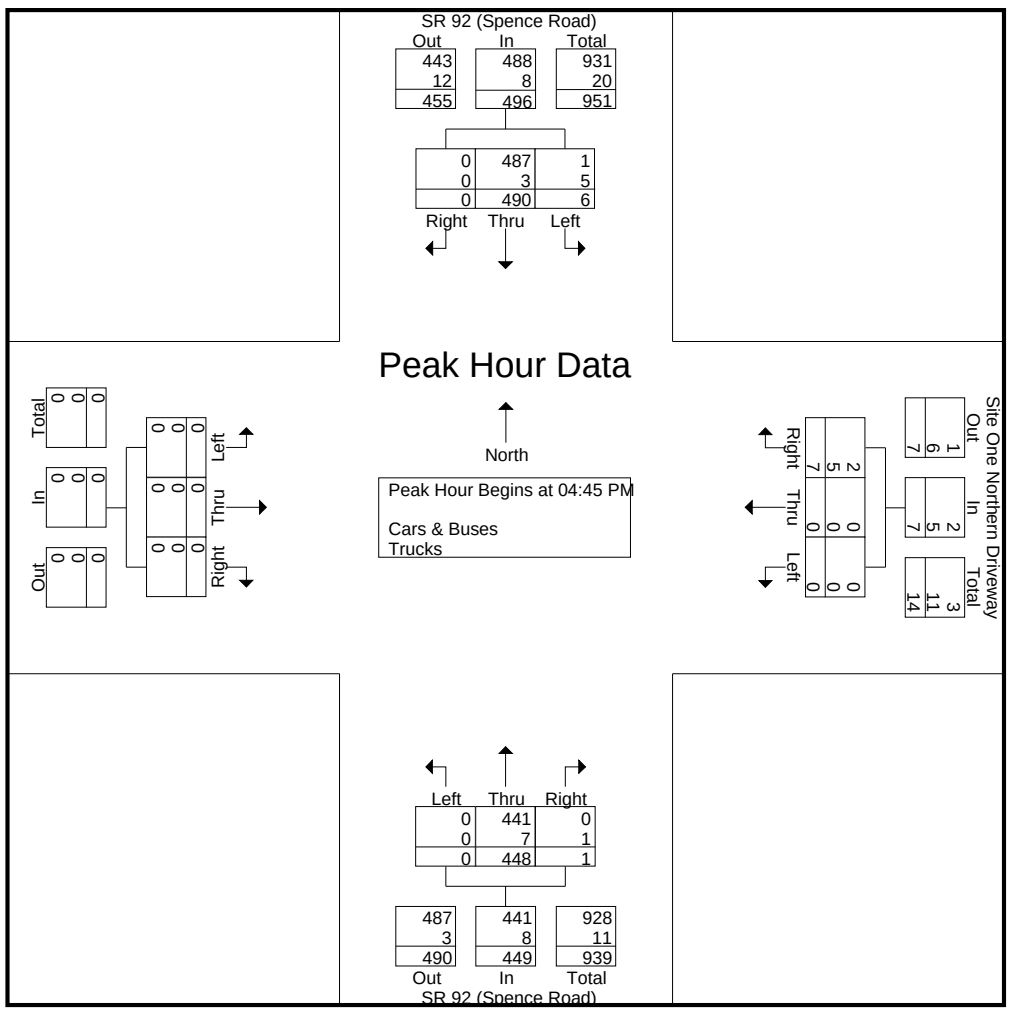
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Site One Northern Driveway
7-9 am | 4-6 pm

File Name : 20240342
Site Code : 20240342
Start Date : 08-28-2024
Page No : 3

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Eastbound				Site One Northern Driveway 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	0	97	**1**	98	1	**129**	0	**130**	0	0	0	0	0	0	1	1	229
05:00 PM	0	88	0	88	**3**	125	0	128	0	0	0	0	0	0	1	1	217
05:15 PM	0	**144**	0	**144**	2	116	0	118	0	0	0	0	0	0	**4**	**4**	**266**
05:30 PM	0	119	0	119	0	120	0	120	0	0	0	0	0	0	1	1	240
Total Volume	0	448	1	449	6	490	0	496	0	0	0	0	0	0	7	7	952
% App. Total	0	99.8	0.2		1.2	98.8	0		0	0	0		0	0	100		
PHF	.000	.778	.250	.780	.500	.950	.000	.954	.000	.000	.000	.000	.000	.000	.438	.438	.895
Cars & Buses	0	441	0	441	1	487	0	488	0	0	0	0	0	0	2	2	931
% Cars & Buses	0	98.4	0	98.2	16.7	99.4	0	98.4	0	0	0	0	0	0	28.6	28.6	97.8
Trucks	0	7	1	8	5	3	0	8	0	0	0	0	0	0	5	5	21
% Trucks	0	1.6	100	1.8	83.3	0.6	0	1.6	0	0	0	0	0	0	71.4	71.4	2.2



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Site One Southern Driveway
7-9 am | 4-6 pm

File Name : 20240343
Site Code : 20240343
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Eastbound				Site One Southern Driveway 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	0	86	0	86	2	66	0	68	0	0	0	0	0	0	0	0	154
07:15 AM	0	102	0	102	1	72	0	73	0	0	0	0	0	0	0	0	175
07:30 AM	0	126	0	126	0	95	0	95	0	0	0	0	0	0	0	0	221
07:45 AM	0	111	0	111	0	81	0	81	0	0	0	0	0	0	1	1	193
Total	0	425	0	425	3	314	0	317	0	0	0	0	0	0	1	1	743
08:00 AM	0	99	0	99	1	94	0	95	0	0	0	0	0	0	0	0	194
08:15 AM	0	70	0	70	1	79	0	80	0	0	0	0	0	0	1	1	151
08:30 AM	0	67	0	67	1	68	0	69	0	0	0	0	0	0	0	0	136
08:45 AM	0	46	0	46	0	72	0	72	0	0	0	0	0	0	0	0	118
Total	0	282	0	282	3	313	0	316	0	0	0	0	0	0	1	1	599
*** BREAK ***																	
04:00 PM	0	114	0	114	0	116	0	116	0	0	0	0	0	0	0	0	230
04:15 PM	0	117	0	117	0	104	0	104	0	0	0	0	0	0	0	0	221
04:30 PM	0	99	0	99	0	103	0	103	0	0	0	0	0	0	0	0	202
04:45 PM	0	98	0	98	0	131	0	131	0	0	0	0	0	0	0	0	229
Total	0	428	0	428	0	454	0	454	0	0	0	0	0	0	0	0	882
05:00 PM	0	88	0	88	0	125	0	125	0	0	0	0	0	0	0	0	213
05:15 PM	0	143	0	143	0	117	0	117	0	0	0	0	0	0	0	0	260
05:30 PM	0	118	0	118	0	119	0	119	0	0	0	0	0	0	1	1	238
05:45 PM	0	100	0	100	0	92	0	92	0	0	0	0	0	0	0	0	192
Total	0	449	0	449	0	453	0	453	0	0	0	0	0	0	1	1	903
Grand Total	0	1584	0	1584	6	1534	0	1540	0	0	0	0	0	0	3	3	3127
Apprch %	0	100	0		0.4	99.6	0		0	0	0		0	0	100		
Total %	0	50.7	0	50.7	0.2	49.1	0	49.2	0	0	0	0	0	0	0.1	0.1	
Cars & Buses	0	1560	0	1560	3	1520	0	1523	0	0	0	0	0	0	1	1	3084
% Cars & Buses	0	98.5	0	98.5	50	99.1	0	98.9	0	0	0	0	0	0	33.3	33.3	98.6
Trucks	0	24	0	24	3	14	0	17	0	0	0	0	0	0	2	2	43
% Trucks	0	1.5	0	1.5	50	0.9	0	1.1	0	0	0	0	0	0	66.7	66.7	1.4

A & R Engineering, Inc.

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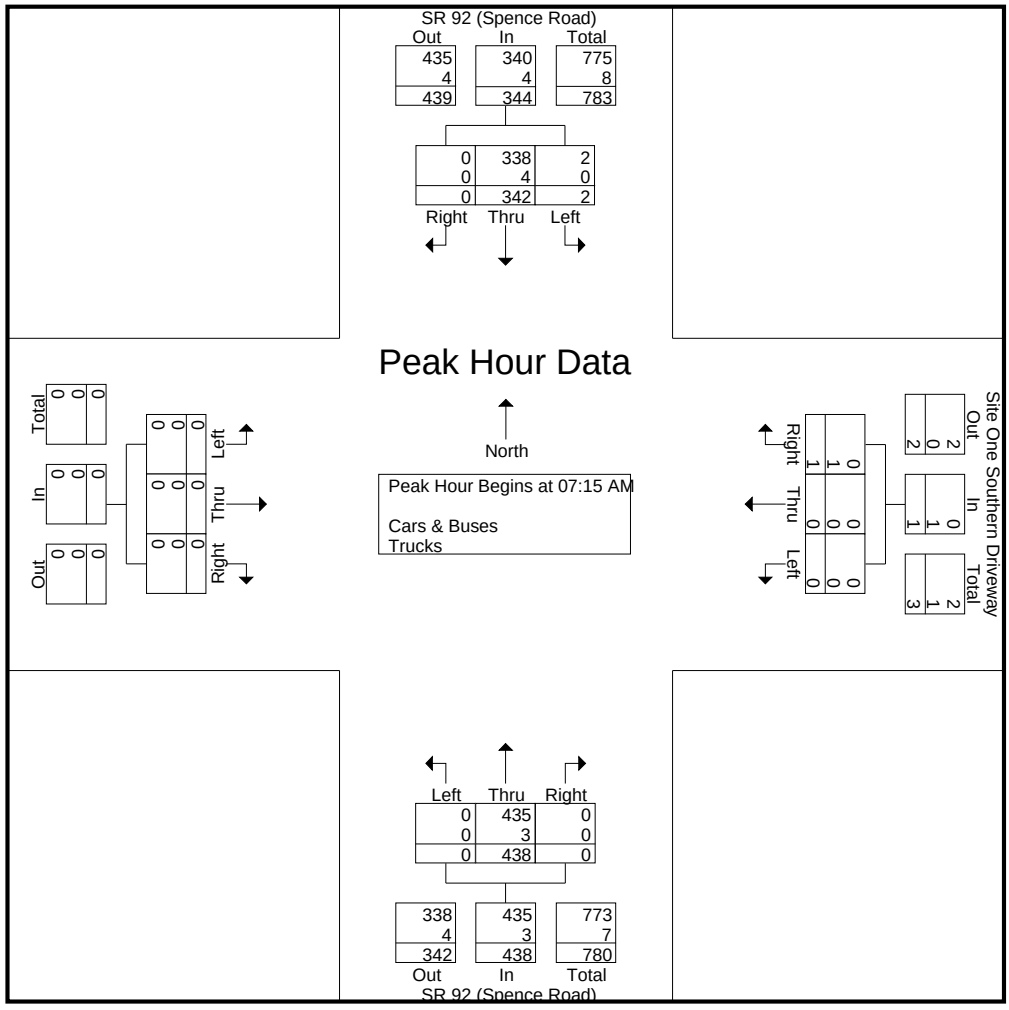
Marietta, GA 30067

TMC Data
SR 92 (Spence Road) @ Site One Southern Driveway
7-9 am | 4-6 pm

File Name : 20240343
Site Code : 20240343
Start Date : 08-28-2024
Page No : 2

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Eastbound				Site One Southern Driveway 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 07:15 AM																	
07:15 AM	0	102	0	102	**1**	72	0	73	0	0	0	0	0	0	0	0	175
07:30 AM	0	**126**	0	**126**	0	**95**	0	**95**	0	0	0	0	0	0	0	0	**221**
07:45 AM	0	111	0	111	0	81	0	81	0	0	0	0	0	0	**1**	**1**	193
08:00 AM	0	99	0	99	1	94	0	95	0	0	0	0	0	0	0	0	194
Total Volume	0	438	0	438	2	342	0	344	0	0	0	0	0	0	1	1	783
% App. Total	0	100	0		0.6	99.4	0		0	0	0		0	0	100		
PHF	.000	.869	.000	.869	.500	.900	.000	.905	.000	.000	.000	.000	.000	.000	.250	.250	.886
Cars & Buses	0	435	0	435	2	338	0	340	0	0	0	0	0	0	0	0	775
% Cars & Buses	0	99.3	0	99.3	100	98.8	0	98.8	0	0	0	0	0	0	0	0	99.0
Trucks	0	3	0	3	0	4	0	4	0	0	0	0	0	0	1	1	8
% Trucks	0	0.7	0	0.7	0	1.2	0	1.2	0	0	0	0	0	0	100	100	1.0



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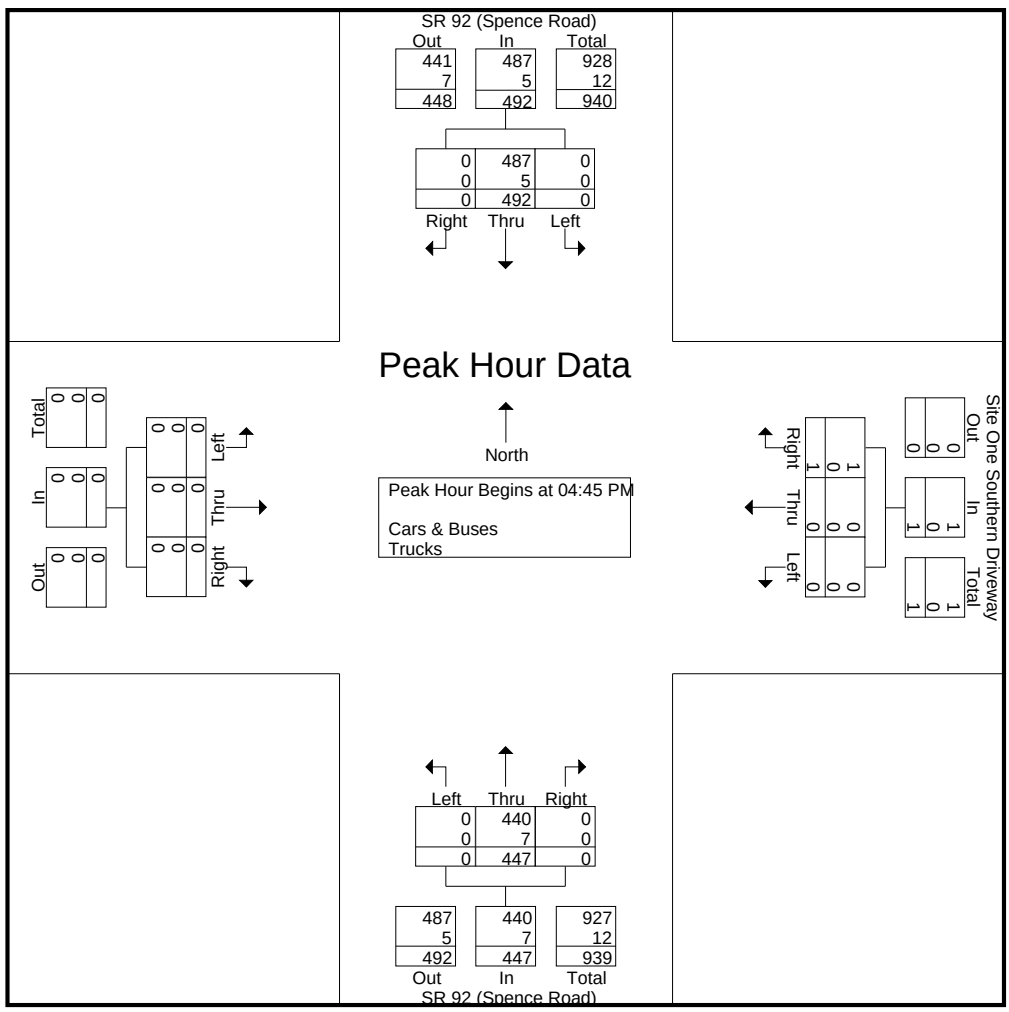
TMC Data
SR 92 (Spence Road) @ Site One Southern Driveway
7-9 am | 4-6 pm

File Name : 20240343
Site Code : 20240343
Start Date : 08-28-2024
Page No : 3

	SR 92 (Spence Road) Northbound				SR 92 (Spence Road) Southbound				Eastbound				Site One Southern Driveway 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	0	98	0	98	0	**131**	0	**131**	0	0	0	0	0	0	0	0	229
05:00 PM	0	88	0	88	0	125	0	125	0	0	0	0	0	0	0	0	213
05:15 PM	0	**143**	0	**143**	0	117	0	117	0	0	0	0	0	0	0	0	**260**
05:30 PM	0	118	0	118	0	119	0	119	0	0	0	0	0	0	**1**	**1**	238
Total Volume	0	447	0	447	0	492	0	492	0	0	0	0	0	0	1	1	940
% App. Total	0	100	0		0	100	0		0	0	0		0	0	100		
PHF	.000	.781	.000	.781	.000	.939	.000	.939	.000	.000	.000	.000	.000	.000	.250	.250	.904
Cars & Buses	0	440	0	440	0	487	0	487	0	0	0	0	0	0	1	1	928
% Cars & Buses	0	98.4	0	98.4	0	99.0	0	99.0	0	0	0	0	0	0	100	100	98.7
Trucks	0	7	0	7	0	5	0	5	0	0	0	0	0	0	0	0	12
% Trucks	0	1.6	0	1.6	0	1.0	0	1.0	0	0	0	0	0	0	0	0	1.3



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TMC Data
SR 92 Spence Road @ Lees Lake Road /
Lees Mill Road
7-9 am | 4-6 pm

File Name : 20240344
Site Code : 20240344
Start Date : 08-28-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	Lees Lake Road Northbound				Lees Mill Road Southbound				SR 92 (Spence Road) Eastbound				SR 92 (Spence Road) 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	17	2	7	26	0	2	1	3	1	60	2	63	6	68	0	74	166
07:15 AM	20	5	3	28	0	2	2	4	1	65	2	68	4	81	0	85	185
07:30 AM	24	3	6	33	0	1	1	2	1	80	8	89	4	105	1	110	234
07:45 AM	19	4	2	25	0	0	1	1	0	78	7	85	9	91	0	100	211
Total	80	14	18	112	0	5	5	10	3	283	19	305	23	345	1	369	796
08:00 AM	12	4	9	25	0	2	0	2	1	84	12	97	5	65	0	70	194
08:15 AM	10	0	4	14	0	0	0	0	1	66	9	76	3	63	0	66	156
08:30 AM	2	3	8	13	0	2	1	3	0	60	9	69	4	61	0	65	150
08:45 AM	6	2	4	12	0	1	0	1	0	65	5	70	8	37	0	45	128
Total	30	9	25	64	0	5	1	6	2	275	35	312	20	226	0	246	628
*** BREAK ***																	
04:00 PM	6	3	7	16	0	4	0	4	2	81	8	91	7	87	0	94	205
04:15 PM	7	1	5	13	0	4	1	5	1	96	12	109	7	99	1	107	234
04:30 PM	11	2	7	20	0	5	1	6	0	89	11	100	6	102	1	109	235
04:45 PM	7	2	3	12	1	4	0	5	0	95	11	106	9	98	0	107	230
Total	31	8	22	61	1	17	2	20	3	361	42	406	29	386	2	417	904
05:00 PM	12	2	9	23	0	1	0	1	0	115	8	123	13	75	0	88	235
05:15 PM	9	3	6	18	0	3	0	3	2	113	17	132	14	87	0	101	254
05:30 PM	8	0	8	16	0	4	1	5	1	104	8	113	14	128	0	142	276
05:45 PM	17	1	9	27	0	4	0	4	2	98	12	112	11	101	0	112	255
Total	46	6	32	84	0	12	1	13	5	430	45	480	52	391	0	443	1020
Grand Total	187	37	97	321	1	39	9	49	13	1349	141	1503	124	1348	3	1475	3348
Apprch %	58.3	11.5	30.2		2	79.6	18.4		0.9	89.8	9.4		8.4	91.4	0.2		
Total %	5.6	1.1	2.9	9.6	0	1.2	0.3	1.5	0.4	40.3	4.2	44.9	3.7	40.3	0.1	44.1	
Cars & Buses	184	37	97	318	1	39	9	49	13	1336	140	1489	121	1323	3	1447	3303
% Cars & Buses	98.4	100	100	99.1	100	100	100	100	100	99	99.3	99.1	97.6	98.1	100	98.1	98.7
Trucks	3	0	0	3	0	0	0	0	0	13	1	14	3	25	0	28	45
% Trucks	1.6	0	0	0.9	0	0	0	0	0	1	0.7	0.9	2.4	1.9	0	1.9	1.3

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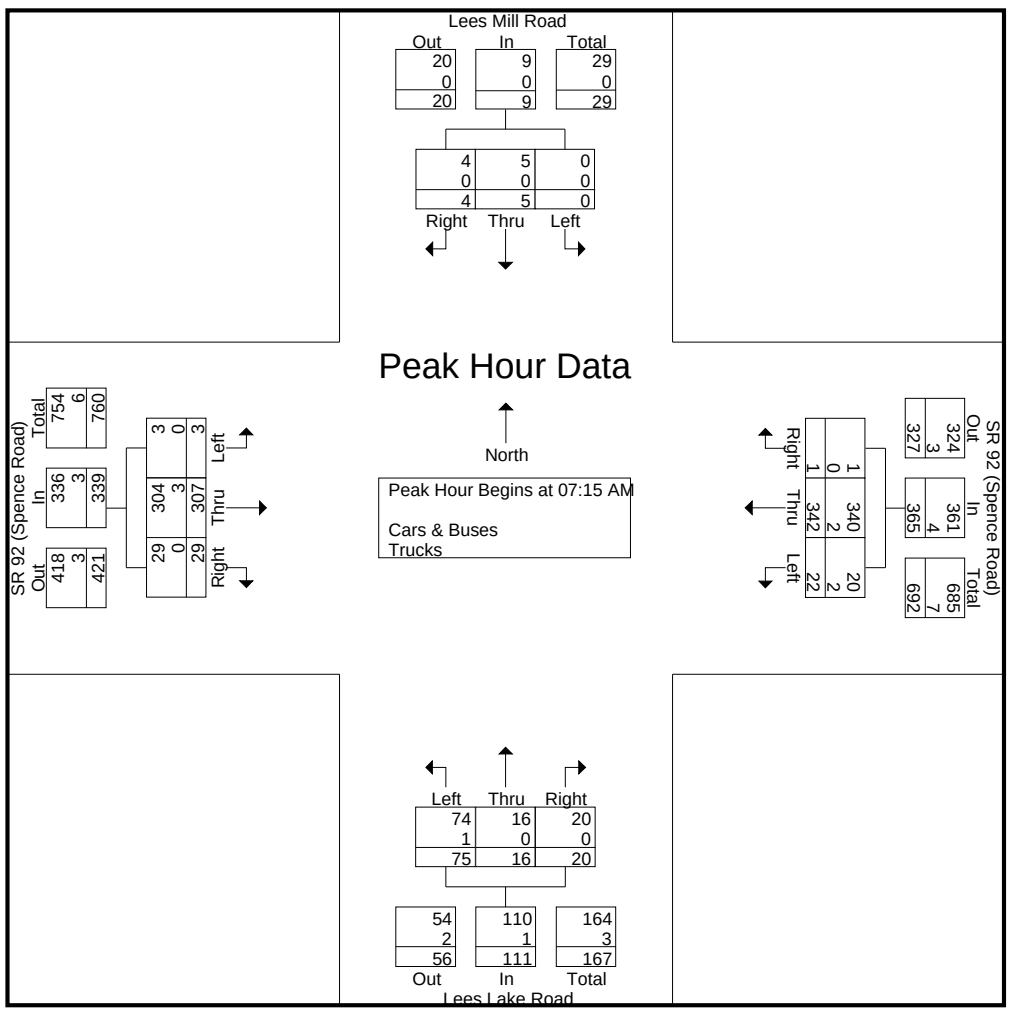
TMC Data
SR 92 Spence Road @ Lees Lake Road /
Lees Mill Road
7-9 am | 4-6 pm

File Name : 20240344
Site Code : 20240344
Start Date : 08-28-2024

	Lees Lake Road Northbound				Lees Mill Road Southbound				SR 92 (Spence Road) Eastbound				SR 92 (Spence Road) 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 07:15 AM																	
07:15 AM	20	**5**	3	28	0	**2**	**2**	**4**	**1**	65	2	68	4	81	0	85	185
07:30 AM	**24**	3	6	**33**	0	1	1	2	1	80	8	89	4	**105**	**1**	**110**	**234**
07:45 AM	19	4	2	25	0	0	1	1	0	78	7	85	**9**	91	0	100	211
08:00 AM	12	4	**9**	25	0	2	0	2	1	**84**	**12**	**97**	5	65	0	70	194
Total Volume	75	16	20	111	0	5	4	9	3	307	29	339	22	342	1	365	824
% App. Total	67.6	14.4	18		0	55.6	44.4		0.9	90.6	8.6		6	93.7	0.3		
PHF	.781	.800	.556	.841	.000	.625	.500	.563	.750	.914	.604	.874	.611	.814	.250	.830	.880
Cars & Buses	74	16	20	110	0	5	4	9	3	304	29	336	20	340	1	361	816
% Cars & Buses	98.7	100	100	99.1	0	100	100	100	100	99.0	100	99.1	90.9	99.4	100	98.9	99.0
Trucks	1	0	0	1	0	0	0	0	0	3	0	3	2	2	0	4	8
% Trucks	1.3	0	0	0.9	0	0	0	0	0	1.0	0	0.9	9.1	0.6	0	1.1	1.0



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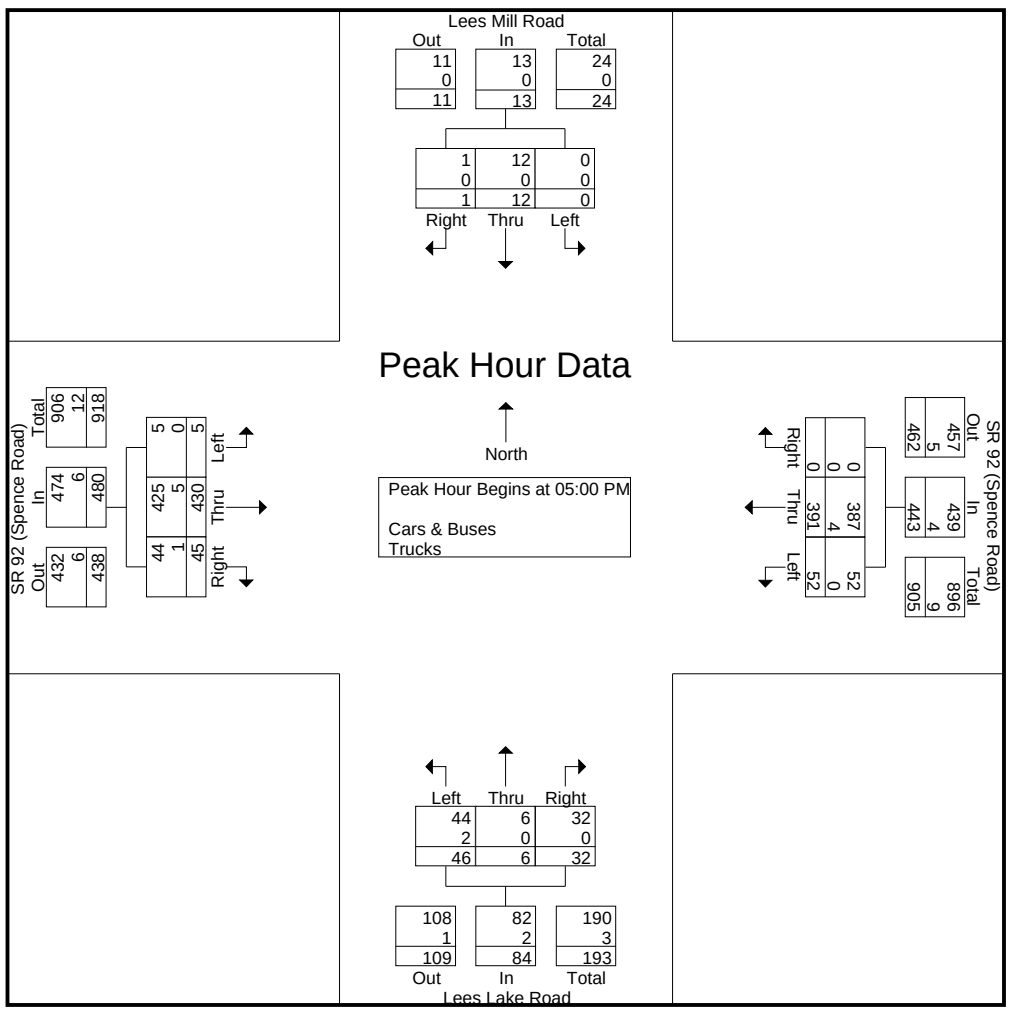
TMC Data
SR 92 Spence Road @ Lees Lake Road /
Lees Mill Road
7-9 am | 4-6 pm

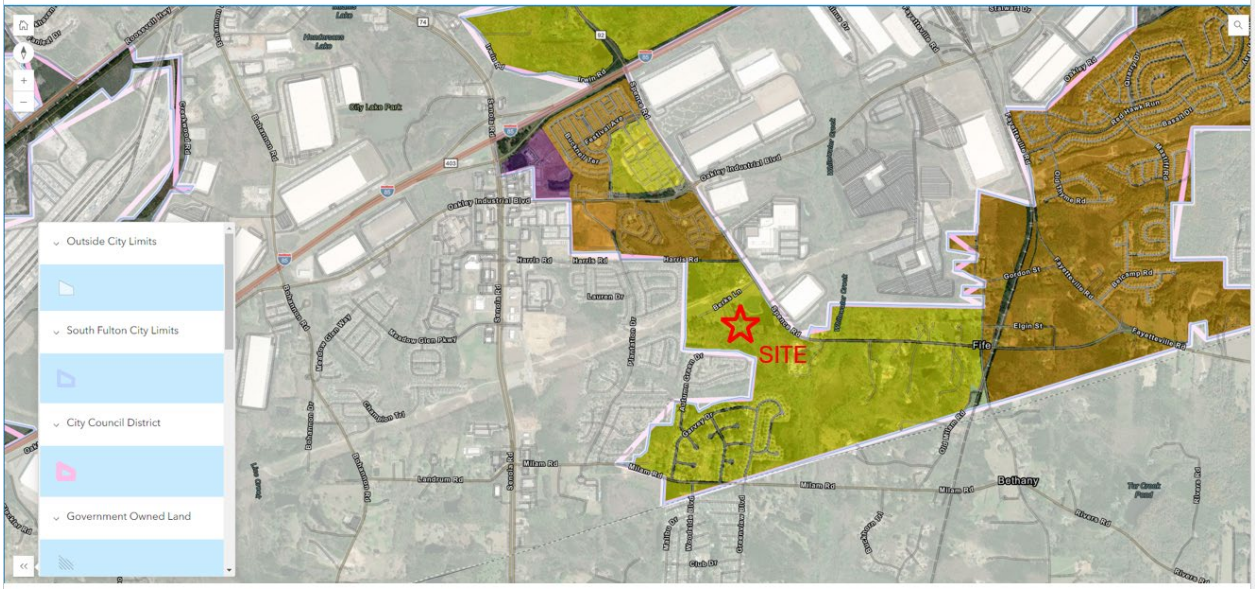
File Name : 20240344
Site Code : 20240344
Start Date : 08-28-2024
Page No : 3

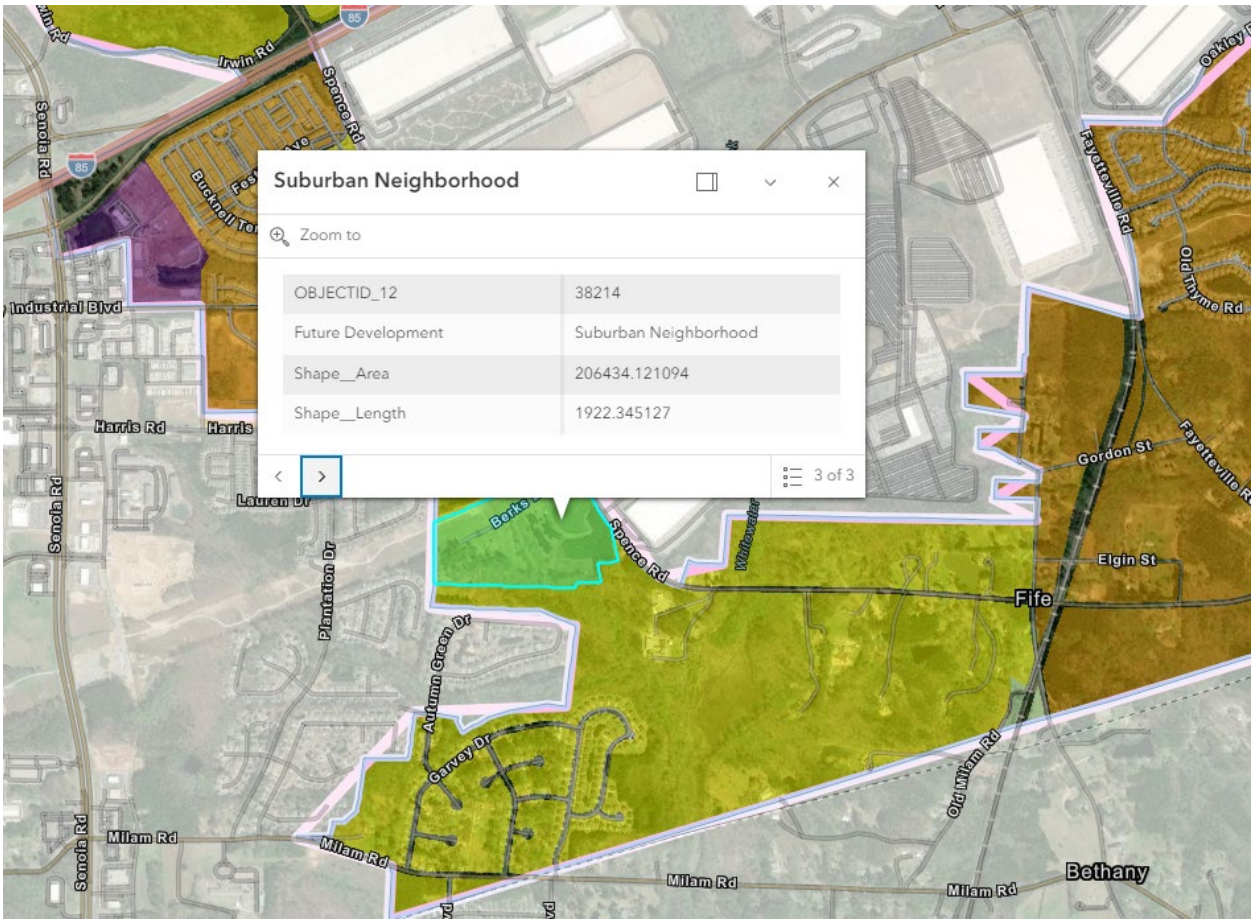
	Lees Lake Road Northbound				Lees Mill Road Southbound				SR 92 (Spence Road) Eastbound				SR 92 (Spence Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	12	2	**9**	23	0	1	0	1	0	**115**	8	123	13	75	0	88	235
05:15 PM	9	**3**	6	18	0	3	0	3	**2**	113	**17**	**132**	**14**	87	0	101	254
05:30 PM	8	0	8	16	0	**4**	**1**	**5**	1	104	8	113	14	**128**	0	**142**	**276**
05:45 PM	**17**	1	9	**27**	0	4	0	4	2	98	12	112	11	101	0	112	255
Total Volume	46	6	32	84	0	12	1	13	5	430	45	480	52	391	0	443	1020
% App. Total	54.8	7.1	38.1		0	92.3	7.7		1	89.6	9.4		11.7	88.3	0		
PHF	.676	.500	.889	.778	.000	.750	.250	.650	.625	.935	.662	.909	.929	.764	.000	.780	.924
Cars & Buses	44	6	32	82	0	12	1	13	5	425	44	474	52	387	0	439	1008
% Cars & Buses	95.7	100	100	97.6	0	100	100	100	100	98.8	97.8	98.8	100	99.0	0	99.1	98.8
Trucks	2	0	0	2	0	0	0	0	0	5	1	6	0	4	0	4	12
% Trucks	4.3	0	0	2.4	0	0	0	0	0	1.2	2.2	1.3	0	1.0	0	0.9	1.2



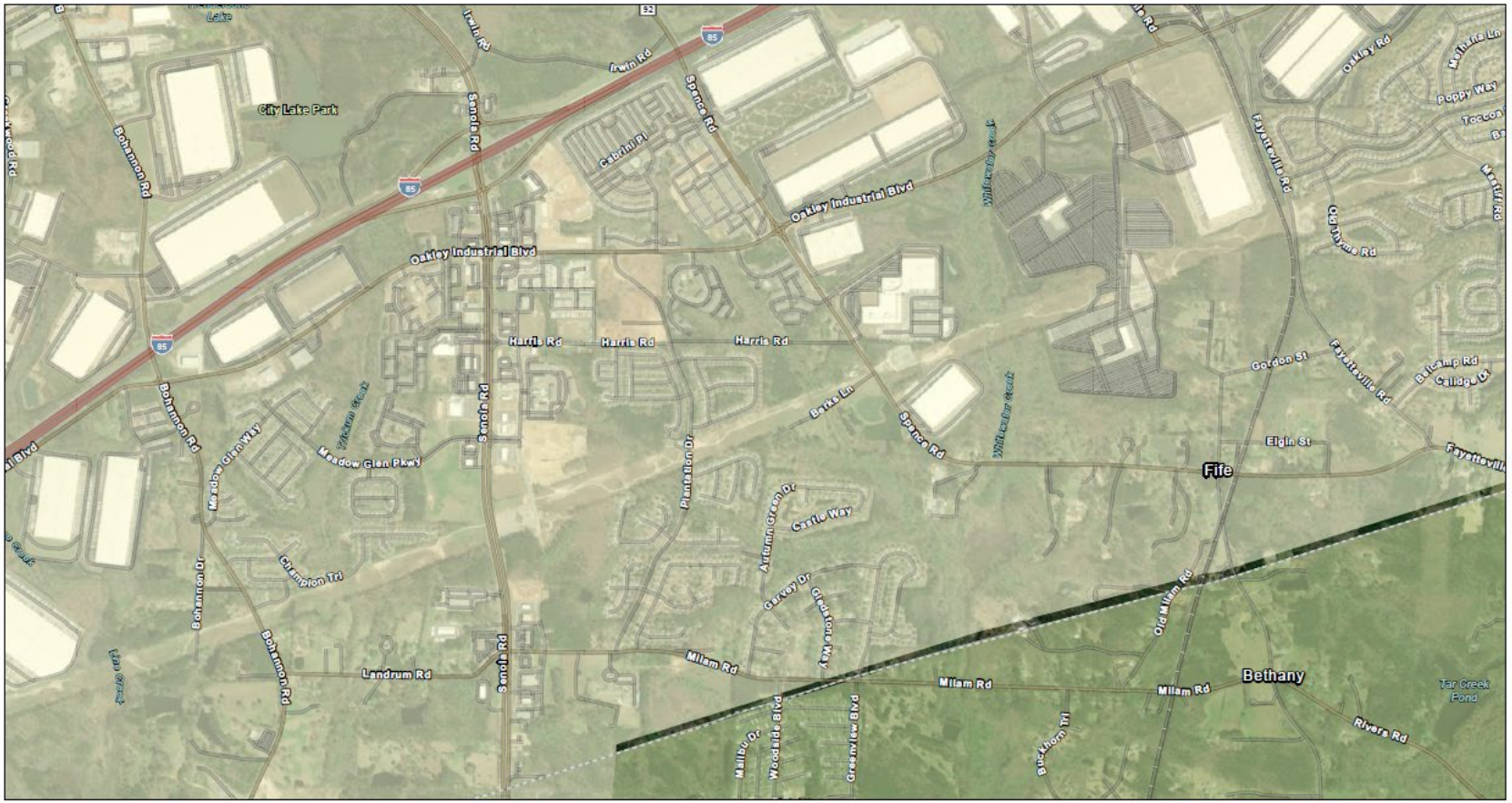
Character Areas

9.12 South Fulton Future Development Map





2021 ARC Unified Growth Policy Map



July 30, 2024

Counties

Expressways

Regional Areas - copy

Developing Rural

Developing Suburbs

1:18,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

GRTA Letter of Understanding

LETTER OF UNDERSTANDING

August 27, 2024

David Weinstein
WB Property Group
495 Broadway, 7th Floor
New York, New York 10012

RE: **Lofts at South Fulton** (**DRI#: 4237)**

Dear David Weinstein:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on August 12, 2024 regarding **Lofts at South Fulton** 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 on SR 92 (Spence Road) in the City of South Fulton. In general, the site is located to the south of I-85 and west of SR 92.
- The proposed development includes an apartment complex with a total of 842 units and approximately 2,000 SF of commercial (retail) space. The property includes 41.724 acres of land.
- The projected build-out is one phase to be completed by 2030.
- The proposed development includes two (2) site accesses along State Route 92 (Spence Road).
- The DRI trigger for this development is a rezoning exceeding the threshold limit of 400,000 gross SF with residential unites estimated at 1,800 per unit or the minimum allowed by the host local government.
- The vehicular trip generation is estimated to be 4,079 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 74 (Senoia Road) @ I-85 Southbound Ramps
2. SR 74 (Senoia Road) @ I-85 Northbound Ramps
3. SR 74 (Senoia Road) @ Oakley Industrial Boulevard
4. SR 92 (Spence Road) @ Oakley Industrial Boulevard
5. SR 92 (Spence Road) @ SiteOne North Driveway /Site Driveway1 (South)
6. SR 92 (Spence Road) @ SiteOne South Driveway
7. SR 92 (Spence Road) @ Lees Lake Road / Lees Mill Road
8. SR 92 (Spence Road) @ Site Driveway 2 (North) (Right-In/Right-Out)

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 2030.

- 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.

- 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

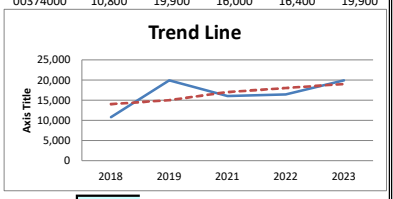
Cc:

Zane Grennell, DCA
Donald Shockey, ARC
Brittany Williams, GRTA/SRTA
Megan Wilson, GDOT District 7
Landon Perry, GDOT District 7
Denise Brookins, City of Fairburn
Sylvia Abernathy, City of Fairburn
Reginald James, ARC
Davina Williams, GDOT
Deborah Bell, Fayette County
Reginald McClendon, City of South Fulton
Phillip Trocquet, Town of Tyrone
Abdul Amer, A&R Engineering, Inc.
Victor Garcia, A&R Engineering, Inc.
Michael Wright, Eberly & Associates, Inc.
Chung Le, Eberly & Associates, Inc

Linear Regression of Daily Traffic

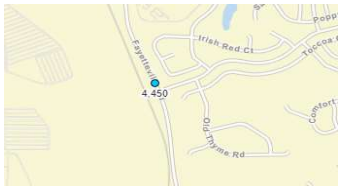
Location	Growth Rate	R Squared	Station ID	Route	2018	2019	2021	2022	2023
Oakley Industrial Blvd (E of Plan	7.9%	0.31	121-7239	00374000	10,800	19,900	16,000	16,400	19,900
Fayetteville Rd (N of Red Hawk I	-0.2%	0.29	121-0787	00131600	4,460	4,490	4,470	4,400	4,450
Spence Road (S of Harris Rd)	6.2%	0.97	121-0284	00009200	6,950	7,760	8,330	8,670	9,040
SR 74 (Senoia Rd) (N of Westboı	-1.6%	0.43	113-0131	00007400	35,500	37,500	35,100	35,800	33,400
Milam Rd (E of Greenview Blvd)	6.9%	0.42	113-8108	00005900	2,610	4,060	4,000	4,100	3,890
Weighted Average	**2.1%**	0.21	Sum of Count Stations =		60,320	73,710	67,900	69,370	70,680

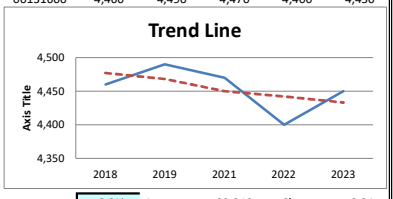
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Oakley Industrial Blvd (E of Plantation Dr)	121-7239	00374000	10,800	19,900	16,000	16,400	19,900



Growth Rate	7.9%	Intercept	########	Slope	1,000.00
Trend Line	14,000	15,000	17,000	18,000	19,000

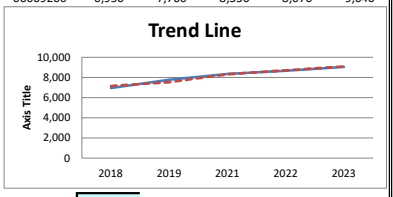
Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Fayetteville Rd (N of Red Hawk Run)	121-0787	00131600	4,460	4,490	4,470	4,400	4,450





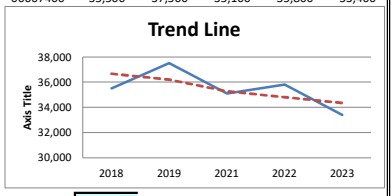
Growth Rate	-0.2%	Intercept	22,310	Slope	-8.84
Trend Line	4,477	4,468	4,450	4,442	4,433

Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Spence Road (S of Harris Rd)	121-0284	00009200	6,950	7,760	8,330	8,670	9,040



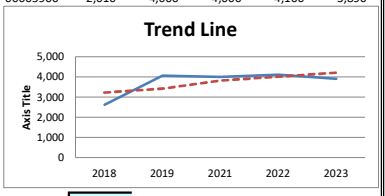
Growth Rate	6.2%	Intercept	-776,595	Slope	388.37
Trend Line	7,140	7,529	8,305	8,694	9,082

Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
SR 74 (Senoia Rd) (N of Westbourne Rd/ Kirkley Rd)	113-0131	00007400	35,500	37,500	35,100	35,800	33,400



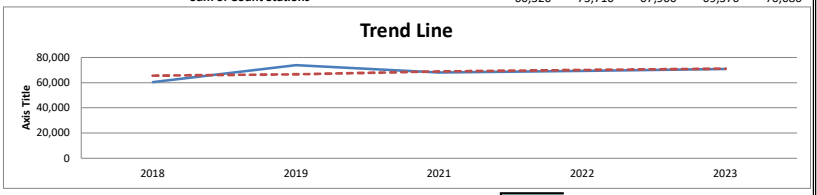
Growth Rate	-1.6%	Intercept	972,924	Slope	-463.95
Trend Line	36,666	36,202	35,274	34,810	34,347

Location	Traffic Counter	RCLINK	2018	2019	2021	2022	2023
Milam Rd (E of Greenview Blvd)	113-8108	00005900	2,610	4,060	4,000	4,100	3,890



Growth Rate	6.9%	Intercept	-394,984	Slope	197.33
Trend Line	3,219	3,416	3,811	4,008	4,206

Weighted Average	2018	2019	2021	2022	2023
Sum of Count Stations	60,320	73,710	67,900	69,370	70,680



Growth Rate	2.1%	Intercept	########	Slope	1,112.91
Trend Line	65,502	66,615	68,841	69,954	71,067

Fact Sheets for Planned and Programmed Improvements

FS-AR-182

2050 MTP PROJECT FACT SHEET

Short Title	I-85 SOUTH INTERCHANGE IMPROVEMENTS AT SR 74 (SENOIA ROAD)
GDOT Project No.	0007841
Federal ID No.	CSNHS-0007-00(841)
Status	Programmed
Service Type	Roadway / Interchange Capacity
Sponsor	City of Fairburn
Jurisdiction	Regional - Southwest
Analysis Level	In the Region's Air Quality Conformity Analysis

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Existing Thru Lane	Var	**LCI**	
Planned Thru Lane	Var	**Flex**	

Network Year	2030
Corridor Length	0.4 miles

Detailed Description and Justification

This is an interchange reconstruction to reduce congestion and provide capacity to the I-85 @ SR 74. The project involves adding turn lanes at the ends of the exit ramps and widening the SR 74 bridge to include turn lanes. The interchange will be a partial cloverleaf design as recommended in the Interchange Modification Report (IMR).

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
SCP	National Highway System	AUTH	2011	**$50,000**	~~$40,000~~	~~$10,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway System	AUTH	2012	**$1,463,377**	~~$1,170,702~~	~~$292,675~~	~~$0,000~~	~~$0,000~~
PE	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2016	**$852,000**	~~$681,600~~	~~$170,400~~	~~$0,000~~	~~$0,000~~
PE	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2017	**$187,500**	~~$150,000~~	~~$37,500~~	~~$0,000~~	~~$0,000~~
PE	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2021	**$574,966**	~~$459,973~~	~~$114,993~~	~~$0,000~~	~~$0,000~~
PE	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2023	**$250,000**	~~$200,000~~	~~$50,000~~	~~$0,000~~	~~$0,000~~
ROW	National Highway Performance Program (NHPP)	AUTH	2019	**$16,693,863**	~~$13,355,090~~	~~$3,338,773~~	~~$0,000~~	~~$0,000~~
ROW	National Highway Performance Program (NHPP)	AUTH	2020	**$13,666,137**	~~$10,932,910~~	~~$2,733,227~~	~~$0,000~~	~~$0,000~~

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

Report Generated: 6/7/2024

UTL	National Highway Performance Program (NHPP)		2025	**$420,582**	$336,466	$84,116	$0,000	$0,000
CST	National Highway Freight Program (NHFP)		2025	**$54,012,397**	$43,209,918	$10,802,479	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2025	**$5,069,256**	$4,055,405	$1,013,851	$0,000	$0,000
CST	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)		2025	**$32,617,798**	$26,094,238	$6,523,560	$0,000	$0,000
				$125,857,876	**$100,686,302**	**$25,171,574**	**$0,000**	**$0,000**

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I.# 0007841
CSNHS-0007-00(841)
Fulton County
GDOT District 7 - Metro Atlanta
I-85 @ SR 74/Senoia Road

OFFICE Design Policy & Support

DATE 8/22/2018

FROM Kim Phillips for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED LOCATION & DESIGN REPORT**

Attached is the approved Location and Design Report with Notice of Location & Design Approval for the above subject project.

Attachment

DISTRIBUTION:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
Kim Nesbitt, Program Delivery Administrator
Bobby Hilliard, Program Control Administrator
Paul Tanner, State Transportation Planning Administrator
Eric Duff, State Environmental Administrator
Bill DuVall, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Erik Rohde, State Project Review Engineer
Benny Walden, Statewide Location Bureau Chief
Kathy Zahul, District Engineer
Paul DeNard, District Preconstruction Engineer
Joseph Cavins, District Planning & Programming Engineer
Lankston Johnson, Area Engineer - D7, A3
Tim Evans, Project Manager
BOARD MEMBER - 13th Congressional District

Rec'd 7-23-18
Revised 8-6-18 KLP

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTEROFFICE CORRESPONDENCE
LOCATION AND DESIGN REPORT

FILE P.I. #0007841
CSHNS-0007-00(841)
Fulton County
GDOT District 7 – Metro Atlanta

I-85 at SR 74/Senoia Road
Interchange Improvements

OFFICE Design Policy & Support

DATE July 13,2018

FROM Kimberly Nesbitt, State Program Delivery Administrator

TO Brent Story P.E., State Design Policy and Support Engineer
Attn: Dave Peters, P.E. State Conceptual Design Group Manager

SUBJECT **REQUEST FOR LOCATION AND DESIGN APPROVAL**

Description and Project Proposal: The proposed project is approximately 1.4 miles along SR 74 from City Lake Road to Milam Road. The project includes the modification of the SR 74 and I-85 interchange to a partial clover leaf, with loop ramps in the southwest and northeast quadrants. Both bridges on SR 74 over I-85 will be replaced. The entire project is located in Fulton County and is located in land district 9.

Concept Approval Date: 08/08/2014

Concept Update: The SR 74 east bound and west bound bridge will be replaced over I-85 North and South Bound due to inadequate clearance over I-85. Widened shoulders will be provided adjacent to I-85 North and Sound Bound up to SR 74 Bridge to facilitate future I-85 travel lanes.

Environmental Document: Document Type: EA/FONSI

Approval Date: DEA approved on 4/28/16
FONSI Approved: 7-30-18

Public Involvement:
Public Information Open House: February 28, 2012
Public Hearing Open House: July 13, 2016

Consistency with Approved Planning:
The design description as presented herein and submitted for approval is consistent with the approved Concept Report.

Recommendations: It is Recommend that the location and design for the project be approved and that the attached Notice be approved for advertising.

Project Number: CSNHS-0007-00(841)
County: Fulton
P.I. Number 0007841

CONCUR: _____
GDOT Director of Engineering

APPROVE: _____ 8/20/18
GDOT Chief Engineer Date

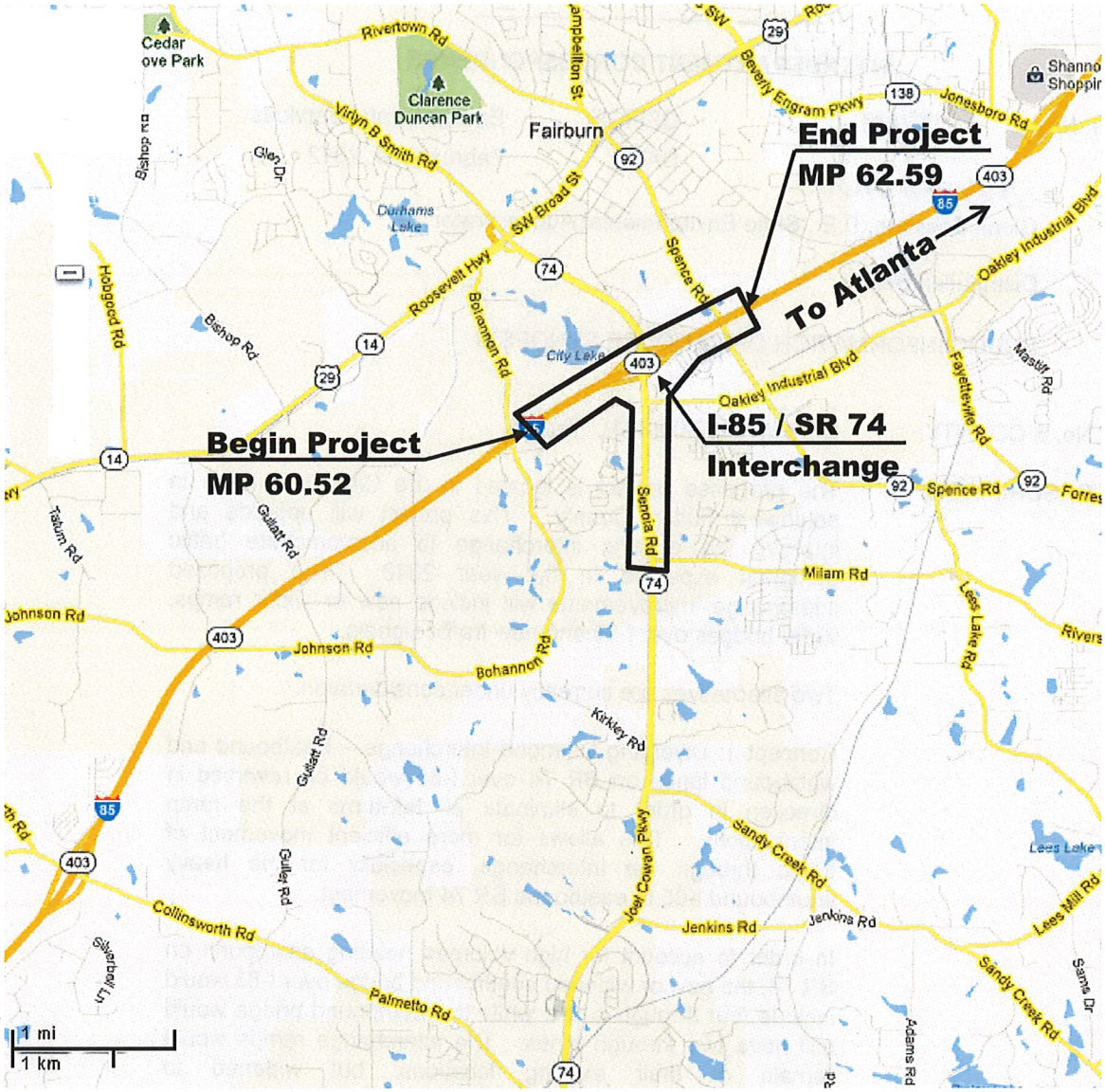
DATE OF LOCATION AND DESIGN APPROVAL: August 22, 2018

KWN: CLB: SHP: DDC: DMR

Attachments:

- Sketch map
- PIOH Summary
- Notice of Location and Design Approval

PROJECT LOCATION MAP



CSNHS-0007-00(841)

PI# 0007841

I-85 @ SR 74

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: P. I. No. 0007841 OFFICE: Environmental Services
DATE: February 29, 2012

GB/mm

FROM Glenn Bowman, P.E., State Environmental Administrator

TO Distribution Below

SUBJECT PUBLIC INFORMATION OPEN HOUSE SYNOPSIS

PROJECT No. & COUNTY: CSNHS-0007-00(841), Fulton

PROJECT DESCRIPTION: The proposed project is located in the City of Fairburn in southwest Fulton County. This project will upgrade and improve the existing interchange to accommodate traffic demands expected in the year 2040. The proposed interchange improvements will include new or wider ramps, wider bridges over I-85 and new traffic signals.

Two alternatives are currently under consideration:

Concept 1: Diverging Diamond Interchange – Eastbound and westbound lanes on SR 74 over I-85 would be reversed in direction in order to eliminate all left-turns at the ramp intersections. This allows for more efficient movement of traffic through the interchange, especially for the heavy southbound I-85 to eastbound SR 74 movement.

In order to account for high volumes heading eastbound on SR 74, the new or widened southbound bridge over I-85 would include four through lanes, while the westbound bridge would still have two through lanes. The interchange ramps would remain at their existing locations, but widened to accommodate higher traffic demands where necessary.

Concept 3: Partial Cloverleaf "B" (2 Loops added to Interchange) – A large two-lane loop ramp would be constructed in the SW quadrant to accommodate the heavy southbound I-85 to eastbound SR 74 movement. The exiting diamond ramp would be converted to a right-turn only ramp for the westbound SR 74 traffic. A single-lane loop ramp would also be constructed in the NE quadrant to accommodate the northbound I-85 to westbound SR 74 movement. Constructing these two loops would allow both movements to continue through the interchange without stopping at a traffic signal.

Both concepts would continue SR 74 east from the interchange with four through lanes in each direction past

	Oakley Industrial Boulevard to the intersection with Harris Road, where SR 74 would continue with three lanes in each direction to the intersection with Milam Road. The on and off ramps facing I-85 north would be extended past the SR 92 overpass in order to provide more stacking distance as well as to accommodate possible future ramps at SR 92.
DATE:	February 28, 2012
NUMBER IN ATTENDANCE:	131
FOR:	22
CONDITIONAL:	6
UNCOMMITTED:	2
AGAINST:	8
OFFICIALS IN ATTENDANCE:	8 Local Elected officials.
ADDITIONAL COMMENTS:	12 of 30 commenters voiced support for concept 3, the clover leaf design, stating the need to build for the future and concern for safety with the diverging diamond concept. 3 commenters noted support for the diverging diamond concept, in part due to reduced cost and construction time. Several comments voiced concern of addressing truck traffic, particularly along Oakly Industrial Blvd, with one requesting grade separation of SR 74 at Oakly Industrial.
PREPARED BY:	Bobby Dollar
TELEPHONE No.:	(404) 631-1920

cc: Gerald M. Ross, P.E.
Russell McMurry, P.E.
Scott Lee
Ernay Robinson

NOTICE OF LOCATION AND DESIGN APPROVAL

CSHNS-0007-00(841) FULTON COUNTY

P.I. NUMBER 0007841

Notice is hereby given in compliance with Georgia Code 22-2-109 and 32-3-5 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location and design approval is: August 22, 2018

This project is an interchange reconstruction to reduce congestion and provide capacity to the I-85 @ SR 74/Senoia Road Interchange. The project is located in Fulton County and Land District 9.

This project is approximately 1.4 miles along SR 74 from City Lake Road to Milam Road. The project includes the modification of the SR 74 and I-85 Interchange to a partial cloverleaf, with loop ramps in the SW and NE quadrants. The project will also widen SR 74 to 4 lanes in each direction from the interchange to Harbin Road and 3 lanes in each direction from Harbin Road to Milam Road.

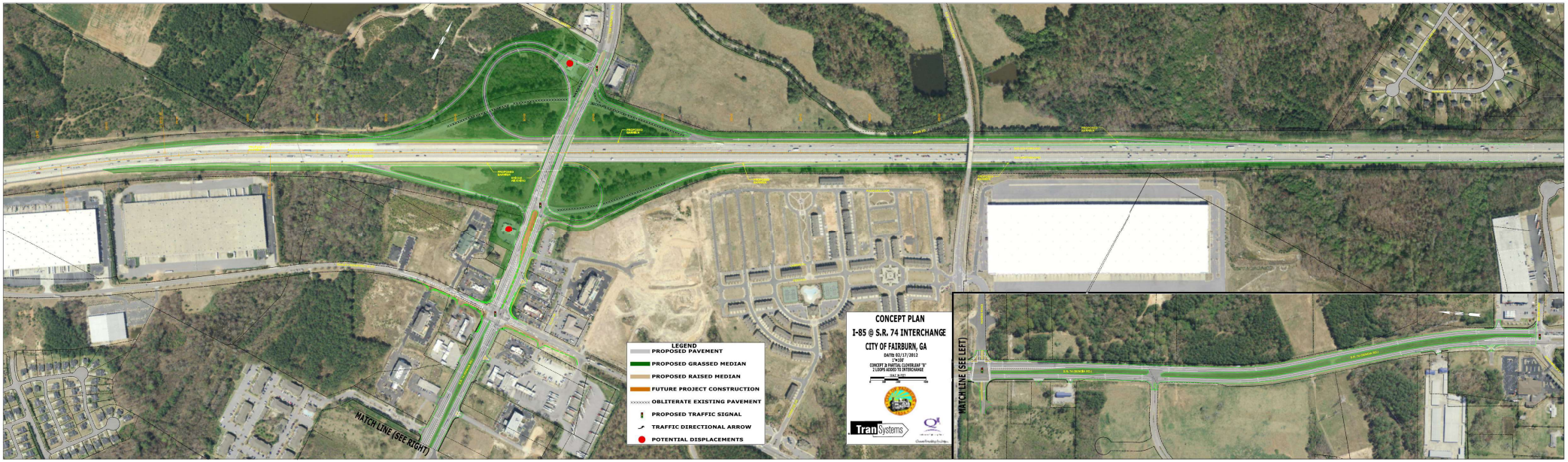
Drawings or maps or plats of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Lankston Johnson, Area Engineer
Georgia Department of Transportation
District 7, Area 3 Office
lajohnson@dot.ga.gov
4125 Roosevelt Highway
College Park, Georgia 30349
(404) 559-6699

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

Kimberly Nesbitt, State Program Delivery Administrator
Office of Program Delivery
Attn: Timothy Evans
tievans@dot.ga.gov
One Georgia Center
600 West Peachtree Street, NW
Atlanta, Georgia 30308
(404) 631-1758

Any written request or communication in reference to this project or notice SHOULD include the Project and P. I. Numbers as noted at the top of this notice.


LEGEND
PROPOSED PAVEMENT
PROPOSED GRASSED MEDIAN
PROPOSED RAISED MEDIAN
FUTURE PROJECT CONSTRUCTION
OBLITERATE EXISTING PAVEMENT
PROPOSED TRAFFIC SIGNAL
TRAFFIC DIRECTIONAL ARROW
POTENTIAL DISPLACEMENTS
CONCEPT PLAN
I-85 @ S.R. 74 INTERCHANGE
CITY OF FAIRBURN, GA
DATED 02/17/2012
1"=200'
CONCEPT A PARTIAL CLOVERLEAF 'B'
1 LOOPS ADDED TO INTERCHANGE
TRANSYSTEMS
MATCH LINE (SEE RIGHT)
MATCH LINE (SEE LEFT)

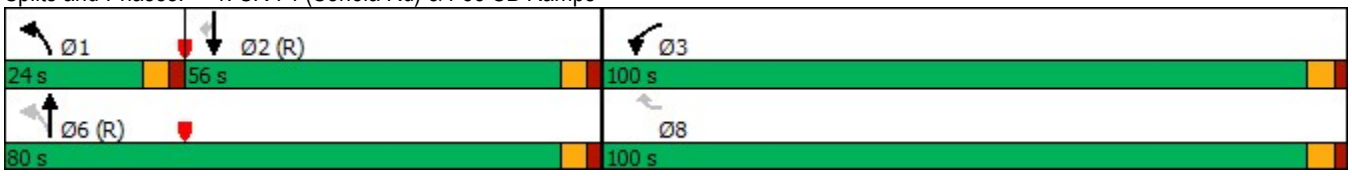
Existing Intersection Analysis

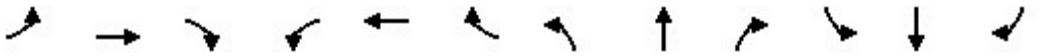
Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1499	656	187	594	544	149
Future Volume (vph)	1499	656	187	594	544	149
Lane Group Flow (vph)	1647	721	205	653	598	164
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	30.5	15.0	28.5	28.5	28.5
Total Split (s)	100.0	100.0	24.0	80.0	56.0	56.0
Total Split (%)	55.6%	55.6%	13.3%	44.4%	31.1%	31.1%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.99	0.92	0.72	0.47	0.63	0.28
Control Delay	60.4	49.8	54.2	36.7	59.9	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	49.8	54.2	36.7	59.9	7.3
Queue Length 50th (ft)	972	671	136	213	328	0
Queue Length 95th (ft)	#1153	#985	204	262	399	61
Internal Link Dist (ft)				772	1209	
Turn Bay Length (ft)	600		70			1000
Base Capacity (vph)	1671	783	289	1383	948	576
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.92	0.71	0.47	0.63	0.28

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 130 (72%), Referenced to phase 2:SBT 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: 1: SR 74 (Senoia Rd) & I-85 SB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1499	0	656	187	594	0	0	544	149
Future Volume (veh/h)	0	0	0	1499	0	656	187	594	0	0	544	149
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1752	0	1633	1767	1781	0	0	1781	1900
Adj Flow Rate, veh/h				1647	0	0	205	653	0	0	598	164
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				10	0	18	9	8	0	0	8	0
Cap, veh/h				1682	0		297	1419	0	0	985	468
Arrive On Green				0.52	0.00	0.00	0.20	0.84	0.00	0.00	0.29	0.29
Sat Flow, veh/h				3237	0	1384	1682	3474	0	0	3474	1610
Grp Volume(v), veh/h				1647	0	0	205	653	0	0	598	164
Grp Sat Flow(s),veh/h/ln				1618	0	1384	1682	1692	0	0	1692	1610
Q Serve(g_s), s				89.6	0.0	0.0	15.5	9.1	0.0	0.0	27.4	14.5
Cycle Q Clear(g_c), s				89.6	0.0	0.0	15.5	9.1	0.0	0.0	27.4	14.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1682	0		297	1419	0	0	985	468
V/C Ratio(X)				0.98	0.00		0.69	0.46	0.00	0.00	0.61	0.35
Avail Cap(c_a), veh/h				1699	0		305	1419	0	0	985	468
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.92	0.92	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.3	0.0	0.0	36.0	9.2	0.0	0.0	55.0	50.4
Incr Delay (d2), s/veh				17.0	0.0	0.0	5.8	1.0	0.0	0.0	2.8	2.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				38.3	0.0	0.0	5.9	2.6	0.0	0.0	12.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.2	0.0	0.0	41.9	10.2	0.0	0.0	57.8	52.4
LnGrp LOS				E	A		D	B	A	A	E	D
Approach Vol, veh/h					1647			858			762	
Approach Delay, s/veh					59.2			17.8			56.6	
Approach LOS					E			B			E	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	23.1	57.9				80.9		99.1				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	18.5	50.5				74.5		94.5				
Max Q Clear Time (g_c+I1), s	17.5	29.4				11.1		91.6				
Green Ext Time (p_c), s	0.1	7.9				9.9		2.0				

Intersection Summary		
HCM 6th Ctrl Delay		47.7
HCM 6th LOS		D

Notes

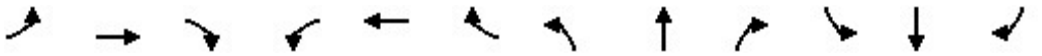
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	193	358	504	1739	334	1769
Future Volume (vph)	193	358	504	1739	334	1769
Lane Group Flow (vph)	212	393	554	1911	367	1944
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	7		6		5	2
Permitted Phases		4		6		
Detector Phase	7	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	15.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	28.5	28.5	15.0	28.5
Total Split (s)	37.0	37.0	109.0	109.0	34.0	143.0
Total Split (%)	20.6%	20.6%	60.6%	60.6%	18.9%	79.4%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.70	1.30	0.29	1.62	1.65	0.76
Control Delay	83.2	203.3	9.5	299.3	335.9	5.2
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.6
Total Delay	83.2	203.4	9.5	299.3	335.9	5.7
Queue Length 50th (ft)	239	~543	87	~3235	~624	360
Queue Length 95th (ft)	340	#770	104	#3441	m#695	m271
Internal Link Dist (ft)			777			772
Turn Bay Length (ft)	260			270	470	
Base Capacity (vph)	303	303	1922	1181	223	2553
Starvation Cap Reductn	0	0	0	13	0	249
Spillback Cap Reductn	0	2	0	0	0	185
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	1.31	0.29	1.64	1.65	0.84

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 149 (83%), Referenced to phase 2:SBT and 6:NBT, 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SR 74 (Senoia Rd) & I-85 NB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	0	358	0	0	0	0	504	1739	334	1769	0
Future Volume (veh/h)	193	0	358	0	0	0	0	504	1739	334	1769	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1841	0	1796				0	1781	1900	1485	1781	0
Adj Flow Rate, veh/h	212	0	0				0	554	0	367	1944	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	0	7				0	8	0	28	8	0
Cap, veh/h	232	0					0	692		808	2730	0
Arrive On Green	0.13	0.00	0.00				0.00	0.34	0.00	0.57	0.81	0.00
Sat Flow, veh/h	1753	0	1522				0	3474	1610	1414	3474	0
Grp Volume(v), veh/h	212	0	0				0	554	0	367	1944	0
Grp Sat Flow(s),veh/h/ln	1753	0	1522				0	1692	1610	1414	1692	0
Q Serve(g_s), s	21.5	0.0	0.0				0.0	26.7	0.0	27.0	47.0	0.0
Cycle Q Clear(g_c), s	21.5	0.0	0.0				0.0	26.7	0.0	27.0	47.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	232	0					0	692		808	2730	0
V/C Ratio(X)	0.91	0.00					0.00	0.80		0.45	0.71	0.00
Avail Cap(c_a), veh/h	307	0					0	1946		808	2730	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.45	0.00	0.33	0.33	0.00
Uniform Delay (d), s/veh	77.1	0.0	0.0				0.0	56.0	0.0	22.3	7.9	0.0
Incr Delay (d2), s/veh	25.5	0.0	0.0				0.0	4.5	0.0	0.1	0.5	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
%ile BackOfQ(50%),veh/ln	11.3	0.0	0.0				0.0	10.7	0.0	8.9	14.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.6	0.0	0.0				0.0	60.4	0.0	22.4	8.5	0.0
LnGrp LOS	F	A					A	E		C	A	A
Approach Vol, veh/h		212						554			2311	
Approach Delay, s/veh		102.6						60.4			10.7	
Approach LOS		F						E			B	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		150.7		29.3	108.4	42.3						
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5						
Max Green Setting (Gmax), s		137.5		31.5	28.5	103.5						
Max Q Clear Time (g_c+I1), s		49.0		23.5	29.0	28.7						
Green Ext Time (p_c), s		63.4		0.3	0.0	8.1						

Intersection Summary												
HCM 6th Ctrl Delay			26.0									
HCM 6th LOS			C									

Notes

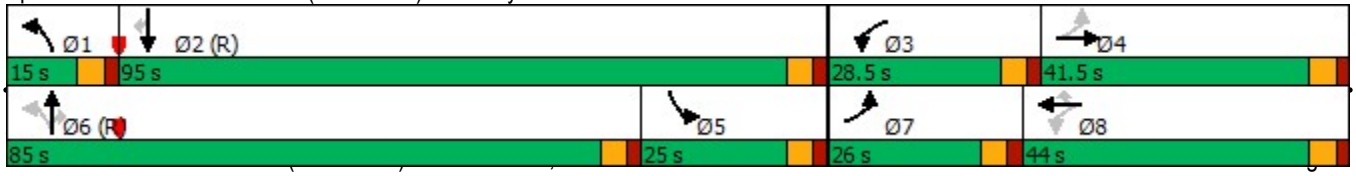
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

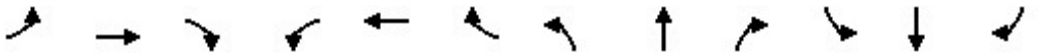
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	154	68	193	77	342	42	1446	97	435	1586	193
Future Volume (vph)	154	68	193	77	342	42	1446	97	435	1586	193
Lane Group Flow (vph)	164	92	205	82	364	45	1538	103	463	1687	205
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6			2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	41.5	15.0	51.5	51.5	15.0	33.5	33.5	15.0	37.5	37.5
Total Split (s)	26.0	41.5	28.5	44.0	44.0	15.0	85.0	85.0	25.0	95.0	95.0
Total Split (%)	14.4%	23.1%	15.8%	24.4%	24.4%	8.3%	47.2%	47.2%	13.9%	52.8%	52.8%
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	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.61	0.56	0.65	0.43	0.88	0.43	0.84	0.12	1.39	0.81	0.23
Control Delay	65.3	81.5	66.0	80.2	45.3	38.2	40.3	7.2	238.0	28.4	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	2.3	0.0	0.0	1.1	0.0
Total Delay	65.3	81.5	66.0	80.2	45.5	38.2	42.6	7.2	238.0	29.5	9.6
Queue Length 50th (ft)	167	99	220	97	134	24	772	11	~375	684	42
Queue Length 95th (ft)	216	151	268	142	226	65	#1126	52	m#453	m#1061	m94
Internal Link Dist (ft)		365		640			877			777	
Turn Bay Length (ft)	180		195		470	240		165	376		240
Base Capacity (vph)	278	316	330	359	534	117	1832	827	332	2084	875
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	189	0
Spillback Cap Reductn	0	0	0	0	14	0	177	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.29	0.62	0.23	0.70	0.38	0.93	0.12	1.39	0.89	0.23

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 0 (0%), Referenced to phase 2:SBT 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: SR 74 (Senoia Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	68	19	193	77	342	42	1446	97	435	1586	193
Future Volume (veh/h)	154	68	19	193	77	342	42	1446	97	435	1586	193
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	1559	1618	1663	1856	1707	1752	1618	1781	1722	1693	1781	1604
Adj Flow Rate, veh/h	164	72	0	205	82	0	45	1538	0	463	1687	205
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, %	23	19	16	3	13	10	19	8	12	14	8	20
Cap, veh/h	226	92		268	107		93	1495		813	2288	919
Arrive On Green	0.11	0.06	0.00	0.12	0.06	0.00	0.03	0.44	0.00	0.26	0.68	0.68
Sat Flow, veh/h	1485	1618	0	1767	1707	1485	1541	3385	1459	3127	3385	1359
Grp Volume(v), veh/h	164	72	0	205	82	0	45	1538	0	463	1687	205
Grp Sat Flow(s),veh/h/ln	1485	1618	0	1767	1707	1485	1541	1692	1459	1564	1692	1359
Q Serve(g_s), s	18.5	7.9	0.0	19.5	8.5	0.0	3.1	79.5	0.0	23.2	58.0	10.4
Cycle Q Clear(g_c), s	18.5	7.9	0.0	19.5	8.5	0.0	3.1	79.5	0.0	23.2	58.0	10.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	92		268	107		93	1495		813	2288	919
V/C Ratio(X)	0.73	0.79		0.76	0.77		0.49	1.03		0.57	0.74	0.22
Avail Cap(c_a), veh/h	226	324		283	365		134	1495		813	2288	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.41	0.41	0.41
Uniform Delay (d), s/veh	69.8	83.8	0.0	69.3	83.1	0.0	43.4	50.2	0.0	57.9	18.8	11.1
Incr Delay (d2), s/veh	11.1	13.7	0.0	11.2	11.0	0.0	3.9	31.0	0.0	0.4	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	3.6	0.0	9.6	4.1	0.0	1.3	39.0	0.0	9.1	21.6	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	97.5	0.0	80.5	94.2	0.0	47.3	81.2	0.0	58.3	19.7	11.4
LnGrp LOS	F	F		F	F		D	F		E	B	B
Approach Vol, veh/h		236			287			1583			2355	
Approach Delay, s/veh		86.0			84.4			80.3			26.6	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	127.2	27.0	15.7	52.3	85.0	26.0	16.7
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	89.5	23.0	36.0	19.5	79.5	20.5	38.5
Max Q Clear Time (g_c+I1), s	5.1	60.0	21.5	9.9	25.2	81.5	20.5	10.5
Green Ext Time (p_c), s	0.0	24.7	0.1	0.3	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

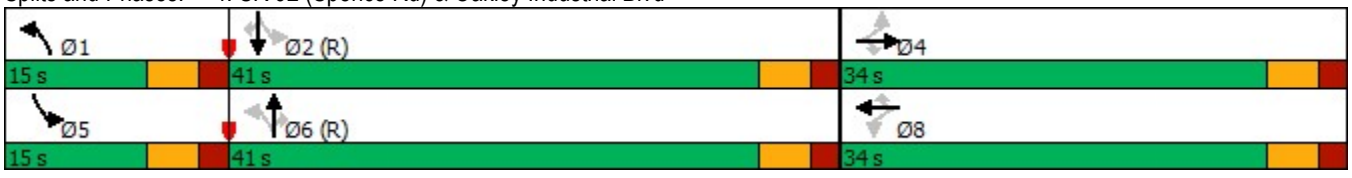
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

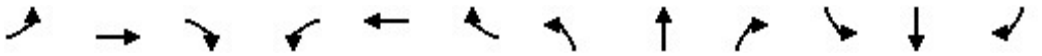
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	265	95	17	203	80	108	316	19	154	329	259
Future Volume (vph)	115	265	95	17	203	80	108	316	19	154	329	259
Lane Group Flow (vph)	135	312	112	20	239	94	127	372	22	181	387	305
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	5	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	5.0	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	15.0	28.5	28.5
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	15.0	41.0	41.0	15.0	41.0	41.0
Total Split (%)	37.8%	37.8%	37.8%	37.8%	37.8%	37.8%	16.7%	45.6%	45.6%	16.7%	45.6%	45.6%
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							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.67	0.74	0.28	0.18	0.59	0.21	0.24	0.42	0.03	0.31	0.44	0.33
Control Delay	55.4	62.7	23.6	28.6	35.5	6.2	8.9	18.8	0.1	9.3	19.0	3.7
Queue Delay	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 Delay	55.4	62.7	23.6	28.6	35.5	6.2	8.9	18.8	0.1	9.3	19.0	3.7
Queue Length 50th (ft)	138	323	76	9	120	0	26	135	0	38	142	4
Queue Length 95th (ft)	m77	m171	m29	25	164	28	55	224	0	75	234	45
Internal Link Dist (ft)		378			487			2694			846	
Turn Bay Length (ft)	170		170	200		150	175		200	90		115
Base Capacity (vph)	270	562	495	148	542	562	549	880	667	608	881	914
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	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	0.50	0.56	0.23	0.14	0.44	0.17	0.23	0.42	0.03	0.30	0.44	0.33

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 69 (77%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: SR 92 (Spence Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	265	95	17	203	80	108	316	19	154	329	259
Future Volume (veh/h)	115	265	95	17	203	80	108	316	19	154	329	259
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	1841	1796	1574	1381	1737	1856	1767	1841	1515	1885	1841	1870
Adj Flow Rate, veh/h	135	312	0	20	239	0	127	372	0	181	387	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	7	22	35	11	3	9	4	26	1	4	2
Cap, veh/h	249	480		169	464		513	877		561	903	
Arrive On Green	0.27	0.27	0.00	0.27	0.27	0.00	0.06	0.48	0.00	0.07	0.49	0.00
Sat Flow, veh/h	1123	1796	1334	788	1737	1572	1682	1841	1284	1795	1841	1585
Grp Volume(v), veh/h	135	312	0	20	239	0	127	372	0	181	387	0
Grp Sat Flow(s),veh/h/ln	1123	1796	1334	788	1737	1572	1682	1841	1284	1795	1841	1585
Q Serve(g_s), s	10.4	13.9	0.0	2.1	10.5	0.0	3.4	11.9	0.0	4.5	12.2	0.0
Cycle Q Clear(g_c), s	21.0	13.9	0.0	15.9	10.5	0.0	3.4	11.9	0.0	4.5	12.2	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	249	480		169	464		513	877		561	903	
V/C Ratio(X)	0.54	0.65		0.12	0.52		0.25	0.42		0.32	0.43	
Avail Cap(c_a), veh/h	304	569		208	550		592	877		619	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.9	29.2	0.0	36.3	28.0	0.0	11.3	15.5	0.0	11.1	14.8	0.0
Incr Delay (d2), s/veh	1.8	2.0	0.0	0.3	0.9	0.0	0.2	1.5	0.0	0.3	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	2.8	5.8	0.0	0.4	4.2	0.0	1.1	4.8	0.0	1.6	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	31.3	0.0	36.6	28.9	0.0	11.5	17.0	0.0	11.4	16.3	0.0
LnGrp LOS	D	C		D	C		B	B		B	B	
Approach Vol, veh/h		447			259			499			568	
Approach Delay, s/veh		33.5			29.5			15.6			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	49.7		29.5	12.1	48.4		29.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	35.5		28.5	9.5	35.5		28.5				
Max Q Clear Time (g_c+I1), s	5.4	14.2		23.0	6.5	13.9		17.9				
Green Ext Time (p_c), s	0.1	4.0		1.1	0.1	3.8		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		21.9	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	439	0	2	346
Future Vol, veh/h	0	3	439	0	2	346
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	100	4	0	100	4
Mvmt Flow	0	3	499	0	2	393

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	896	499	0	0	499	0
Stage 1	499	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.4	7.2	-	-	5.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	-	-	3.1	-
Pot Cap-1 Maneuver	313	417	-	-	705	-
Stage 1	614	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	312	417	-	-	705	-
Mov Cap-2 Maneuver	312	-	-	-	-	-
Stage 1	614	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	417	705	-
HCM Lane V/C Ratio	-	-	0.008	0.003	-
HCM Control Delay (s)	-	-	13.7	10.1	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	438	0	2	342
Future Vol, veh/h	0	1	438	0	2	342
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	-	-	160	240	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	100	4	0	0	4
Mvmt Flow	0	1	492	0	2	384

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	880	492	0	0	492	0
Stage 1	492	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Critical Hdwy	6.4	7.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	-	-	2.2	-
Pot Cap-1 Maneuver	320	421	-	-	1082	-
Stage 1	619	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	319	421	-	-	1082	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	689	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	421	1082	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	13.6	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	307	29	22	342	1	75	16	20	0	5	4
Future Vol, veh/h	3	307	29	22	342	1	75	16	20	0	5	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	4	0	9	4	0	1	4	0	0	4	0
Mvmt Flow	3	349	33	25	389	1	85	18	23	0	6	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	382	0	0	817	812	366	832	828	390
Stage 1	-	-	-	-	-	-	372	372	-	440	440	-
Stage 2	-	-	-	-	-	-	445	440	-	392	388	-
Critical Hdwy	4.1	-	-	4.19	-	-	7.11	6.54	6.2	7.1	6.54	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.54	-	6.1	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.54	-	6.1	5.54	-
Follow-up Hdwy	2.2	-	-	2.281	-	-	3.509	4.036	3.3	3.5	4.036	3.3
Pot Cap-1 Maneuver	1180	-	-	1139	-	-	296	311	684	291	304	663
Stage 1	-	-	-	-	-	-	651	615	-	600	574	-
Stage 2	-	-	-	-	-	-	594	574	-	637	605	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1139	-	-	283	301	684	262	295	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	283	301	-	262	295	-
Stage 1	-	-	-	-	-	-	649	613	-	598	558	-
Stage 2	-	-	-	-	-	-	568	558	-	596	603	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	23.4	14.4
HCM LOS			C	B

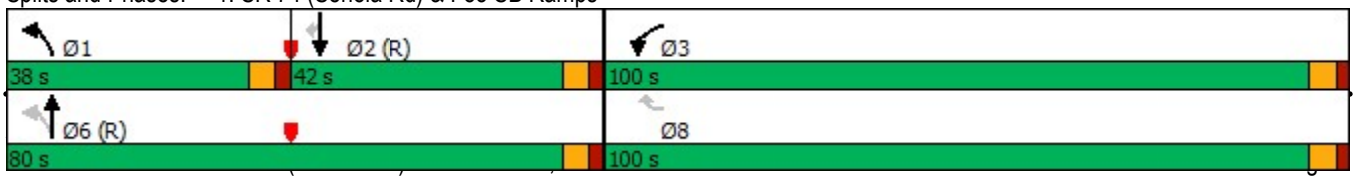
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	320	1180	-	-	1139	-	-	392
HCM Lane V/C Ratio	0.394	0.003	-	-	0.022	-	-	0.026
HCM Control Delay (s)	23.4	8.1	0	-	8.2	0	-	14.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.8	0	-	-	0.1	-	-	0.1

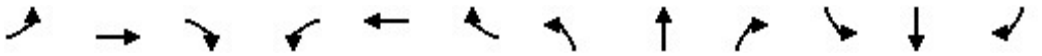
Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1904	560	397	708	655	171
Future Volume (vph)	1904	560	397	708	655	171
Lane Group Flow (vph)	1983	583	414	738	682	178
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	30.5	15.0	28.5	28.5	28.5
Total Split (s)	100.0	100.0	38.0	80.0	42.0	42.0
Total Split (%)	55.6%	55.6%	21.1%	44.4%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	1.12	0.77	1.18	0.53	1.01	0.38
Control Delay	102.8	35.9	168.0	39.8	106.0	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	102.8	35.9	168.0	39.8	106.0	9.5
Queue Length 50th (ft)	~1385	460	~531	257	~434	0
Queue Length 95th (ft)	#1507	646	m#756	320	#576	70
Internal Link Dist (ft)				772	1209	
Turn Bay Length (ft)	600		70			1000
Base Capacity (vph)	1767	755	350	1383	677	469
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.77	1.18	0.53	1.01	0.38

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 129 (72%), Referenced to phase 2:SBT 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: SR 74 (Senoia Rd) & I-85 SB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1904	0	560	397	708	0	0	655	171
Future Volume (veh/h)	0	0	0	1904	0	560	397	708	0	0	655	171
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1604	1826	1781	0	0	1781	1900
Adj Flow Rate, veh/h				1983	0	0	414	738	0	0	682	178
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				4	0	20	5	8	0	0	8	0
Cap, veh/h				1785	0		355	1401	0	0	686	327
Arrive On Green				0.52	0.00	0.00	0.36	0.83	0.00	0.00	0.20	0.20
Sat Flow, veh/h				3401	0	1359	1739	3474	0	0	3474	1610
Grp Volume(v), veh/h				1983	0	0	414	738	0	0	682	178
Grp Sat Flow(s),veh/h/ln				1700	0	1359	1739	1692	0	0	1692	1610
Q Serve(g_s), s				94.5	0.0	0.0	32.5	12.0	0.0	0.0	36.2	17.8
Cycle Q Clear(g_c), s				94.5	0.0	0.0	32.5	12.0	0.0	0.0	36.2	17.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1785	0		355	1401	0	0	686	327
V/C Ratio(X)				1.11	0.00		1.17	0.53	0.00	0.00	0.99	0.55
Avail Cap(c_a), veh/h				1785	0		355	1401	0	0	686	327
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.84	0.84	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.8	0.0	0.0	43.0	10.1	0.0	0.0	71.6	64.3
Incr Delay (d2), s/veh				58.4	0.0	0.0	97.7	1.2	0.0	0.0	32.8	6.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				52.4	0.0	0.0	19.5	3.2	0.0	0.0	18.6	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				101.2	0.0	0.0	140.7	11.3	0.0	0.0	104.5	70.7
LnGrp LOS				F	A		F	B	A	A	F	E
Approach Vol, veh/h					1983			1152			860	
Approach Delay, s/veh					101.2			57.8			97.5	
Approach LOS					F			E			F	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	38.0	42.0				80.0		100.0				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	32.5	36.5				74.5		94.5				
Max Q Clear Time (g_c+I1), s	34.5	38.2				14.0		96.5				
Green Ext Time (p_c), s	0.0	0.0				11.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		87.9
HCM 6th LOS		F

Notes

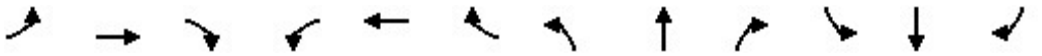
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	189	280	810	1629	426	2146
Future Volume (vph)	189	280	810	1629	426	2146
Lane Group Flow (vph)	197	292	844	1697	444	2235
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	7		6		5	2
Permitted Phases		4		6		
Detector Phase	7	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	15.0	15.0	5.0	15.0
Minimum Split (s)	15.0	31.5	28.5	28.5	15.0	28.5
Total Split (s)	32.0	32.0	108.0	108.0	40.0	148.0
Total Split (%)	17.8%	17.8%	60.0%	60.0%	22.2%	82.2%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.85	1.15	0.44	1.50	1.52	0.84
Control Delay	105.0	154.4	20.4	247.8	268.3	1.2
Queue Delay	0.0	0.3	0.0	0.0	0.0	5.9
Total Delay	105.0	154.6	20.4	247.8	268.3	7.1
Queue Length 50th (ft)	231	~352	227	~2636	~726	1
Queue Length 95th (ft)	#378	#560	m260	#2890	m#638	m1
Internal Link Dist (ft)			777			772
Turn Bay Length (ft)	260			270	470	
Base Capacity (vph)	231	255	1903	1135	293	2646
Starvation Cap Reductn	0	0	0	8	0	229
Spillback Cap Reductn	0	5	0	0	0	371
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.85	1.17	0.44	1.51	1.52	0.98

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 136 (76%), Referenced to phase 2:SBT and 6:NBT, 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SR 74 (Senoia Rd) & I-85 NB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	0	280	0	0	0	0	810	1629	426	2146	0
Future Volume (veh/h)	189	0	280	0	0	0	0	810	1629	426	2146	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1678	0	1737				0	1781	1900	1633	1781	0
Adj Flow Rate, veh/h	197	0	0				0	844	0	444	2235	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	15	0	11				0	8	0	18	8	0
Cap, veh/h	214	0					0	1021		736	2725	0
Arrive On Green	0.13	0.00	0.00				0.00	0.50	0.00	0.47	0.81	0.00
Sat Flow, veh/h	1598	0	1472				0	3474	1610	1555	3474	0
Grp Volume(v), veh/h	197	0	0				0	844	0	444	2235	0
Grp Sat Flow(s),veh/h/ln	1598	0	1472				0	1692	1610	1555	1692	0
Q Serve(g_s), s	21.9	0.0	0.0				0.0	38.2	0.0	37.9	68.2	0.0
Cycle Q Clear(g_c), s	21.9	0.0	0.0				0.0	38.2	0.0	37.9	68.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	214	0					0	1021		736	2725	0
V/C Ratio(X)	0.92	0.00					0.00	0.83		0.60	0.82	0.00
Avail Cap(c_a), veh/h	235	0					0	1927		736	2725	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.31	0.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	77.0	0.0	0.0				0.0	40.6	0.0	35.0	10.1	0.0
Incr Delay (d2), s/veh	36.5	0.0	0.0				0.0	2.5	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	0.0				0.0	14.0	0.0	14.2	20.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.6	0.0	0.0				0.0	43.2	0.0	35.1	10.3	0.0
LnGrp LOS	F	A					A	D		D	B	A
Approach Vol, veh/h		197						844			2679	
Approach Delay, s/veh		113.6						43.2			14.4	
Approach LOS		F						D			B	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		150.4		29.6	90.6	59.8						
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5						
Max Green Setting (Gmax), s		142.5		26.5	34.5	102.5						
Max Q Clear Time (g_c+I1), s		70.2		23.9	39.9	40.2						
Green Ext Time (p_c), s		62.7		0.1	0.0	14.2						

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

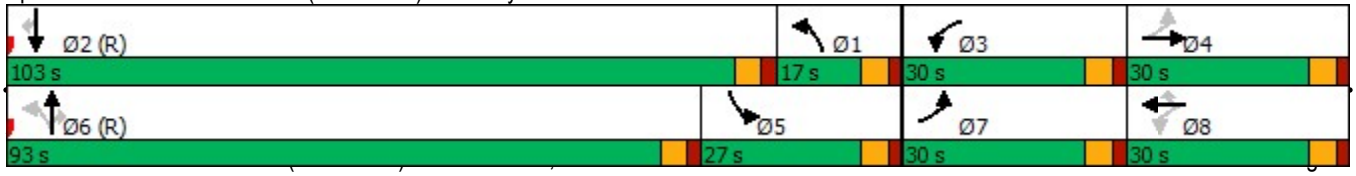
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	194	107	248	100	337	78	1490	109	455	1778	153
Future Volume (vph)	194	107	248	100	337	78	1490	109	455	1778	153
Lane Group Flow (vph)	200	143	256	103	347	80	1536	112	469	1833	158
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		1	6		5	2	
Permitted Phases	4		8		8	6		6			2
Detector Phase	7	4	3	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	41.5	15.0	51.5	51.5	15.0	33.5	33.5	15.0	37.5	37.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	17.0	93.0	93.0	27.0	103.0	103.0
Total Split (%)	16.7%	16.7%	16.7%	16.7%	16.7%	9.4%	51.7%	51.7%	15.0%	57.2%	57.2%
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	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.65	0.70	0.79	0.48	0.95	0.56	0.92	0.15	1.16	0.97	0.20
Control Delay	63.6	90.0	72.3	82.2	68.9	67.3	52.1	3.9	139.7	38.7	7.3
Queue Delay	1.5	0.0	0.0	0.0	18.2	0.0	10.4	0.0	0.0	22.8	0.0
Total Delay	65.2	90.0	72.3	82.2	87.1	67.3	62.6	3.9	139.7	61.5	7.3
Queue Length 50th (ft)	190	154	270	121	200	45	898	0	~357	~1125	19
Queue Length 95th (ft)	276	238	349	182	#397	109	#1042	35	m#446	m#1270	m37
Internal Link Dist (ft)		365		640			877			777	
Turn Bay Length (ft)	180		195		470	240		165	376		240
Base Capacity (vph)	325	234	333	237	381	144	1668	770	404	1889	790
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	149	0
Spillback Cap Reductn	37	0	0	0	38	0	140	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.61	0.77	0.43	1.01	0.56	1.01	0.15	1.16	1.05	0.20

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 172 (96%), Referenced to phase 2:SBT 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: SR 74 (Senoia Rd) & Oakley Industrial Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	107	32	248	100	337	78	1490	109	455	1778	153
Future Volume (veh/h)	194	107	32	248	100	337	78	1490	109	455	1778	153
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	1663	1752	1811	1885	1767	1752	1767	1781	1707	1707	1781	1589
Adj Flow Rate, veh/h	200	110	0	256	103	0	80	1536	0	469	1833	158
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, %	16	10	6	1	9	10	9	8	13	13	8	21
Cap, veh/h	272	131		301	148		369	1628		587	1655	659
Arrive On Green	0.13	0.07	0.00	0.14	0.08	0.00	0.18	0.48	0.00	0.37	0.98	0.98
Sat Flow, veh/h	1584	1752	0	1795	1767	1485	1682	3385	1447	3155	3385	1346
Grp Volume(v), veh/h	200	110	0	256	103	0	80	1536	0	469	1833	158
Grp Sat Flow(s),veh/h/ln	1584	1752	0	1795	1767	1485	1682	1692	1447	1577	1692	1346
Q Serve(g_s), s	20.8	11.2	0.0	23.6	10.2	0.0	0.0	77.6	0.0	23.9	88.0	0.4
Cycle Q Clear(g_c), s	20.8	11.2	0.0	23.6	10.2	0.0	0.0	77.6	0.0	23.9	88.0	0.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	131		301	148		369	1628		587	1655	659
V/C Ratio(X)	0.73	0.84		0.85	0.69		0.22	0.94		0.80	1.11	0.24
Avail Cap(c_a), veh/h	287	238		301	240		369	1645		587	1833	729
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	0.36	0.36	0.36
Uniform Delay (d), s/veh	65.9	82.2	0.0	65.8	80.2	0.0	56.0	44.4	0.0	53.5	2.0	0.4
Incr Delay (d2), s/veh	8.9	13.1	0.0	20.1	5.7	0.0	0.3	12.4	0.0	2.9	52.0	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	9.0	5.5	0.0	12.4	4.9	0.0	3.0	34.3	0.0	8.3	12.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.8	95.4	0.0	85.9	85.9	0.0	56.3	56.8	0.0	56.4	54.0	0.7
LnGrp LOS	E	F		F	F		E	E		E	F	A
Approach Vol, veh/h		310			359			1616			2460	
Approach Delay, s/veh		82.1			85.9			56.8			51.0	
Approach LOS		F			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.0	98.1	30.0	19.0	39.0	92.1	28.4	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	11.5	97.5	24.5	24.5	21.5	87.5	24.5	24.5
Max Q Clear Time (g_c+I1), s	2.0	90.0	25.6	13.2	25.9	79.6	22.8	12.2
Green Ext Time (p_c), s	0.1	7.1	0.0	0.3	0.0	6.9	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	57.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

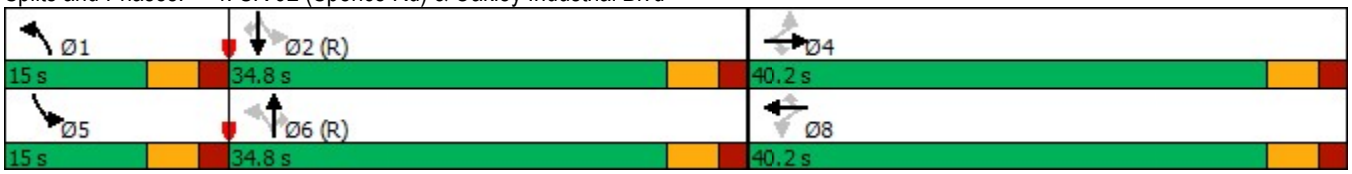
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

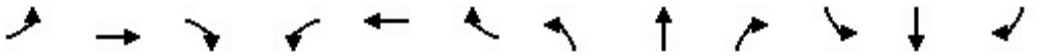
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	218	106	21	393	134	153	286	21	119	336	273
Future Volume (vph)	94	218	106	21	393	134	153	286	21	119	336	273
Lane Group Flow (vph)	104	242	118	23	437	149	170	318	23	132	373	303
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	5	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	5.0	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	15.0	28.5	28.5
Total Split (s)	40.2	40.2	40.2	40.2	40.2	40.2	15.0	34.8	34.8	15.0	34.8	34.8
Total Split (%)	44.7%	44.7%	44.7%	44.7%	44.7%	44.7%	16.7%	38.7%	38.7%	16.7%	38.7%	38.7%
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	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							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.82	0.47	0.22	0.08	0.80	0.26	0.35	0.42	0.03	0.25	0.50	0.38
Control Delay	70.4	27.5	9.4	20.0	39.9	4.6	12.8	22.8	0.1	12.1	25.0	5.8
Queue Delay	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 Delay	70.4	27.5	9.4	20.0	39.9	4.6	12.8	22.8	0.1	12.1	25.0	5.8
Queue Length 50th (ft)	91	174	35	9	224	0	44	128	0	33	160	12
Queue Length 95th (ft)	m83	m96	m4	24	302	36	90	229	0	72	274	72
Internal Link Dist (ft)		378			487			2694			846	
Turn Bay Length (ft)	170		170	200		150	175		200	90		115
Base Capacity (vph)	160	648	643	377	684	684	503	760	667	540	740	790
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	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	0.65	0.37	0.18	0.06	0.64	0.22	0.34	0.42	0.03	0.24	0.50	0.38

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 1 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: SR 92 (Spence Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	218	106	21	393	134	153	286	21	119	336	273
Future Volume (veh/h)	94	218	106	21	393	134	153	286	21	119	336	273
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	1752	1707	1767	1900	1796	1826	1856	1841	1752	1811	1841	1841
Adj Flow Rate, veh/h	104	242	0	23	437	0	170	318	0	132	373	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, %	10	13	9	0	7	5	3	4	10	6	4	4
Cap, veh/h	207	599		362	631		451	735		476	712	
Arrive On Green	0.35	0.35	0.00	0.35	0.35	0.00	0.08	0.40	0.00	0.07	0.39	0.00
Sat Flow, veh/h	891	1707	1497	1156	1796	1547	1767	1841	1485	1725	1841	1560
Grp Volume(v), veh/h	104	242	0	23	437	0	170	318	0	132	373	0
Grp Sat Flow(s),veh/h/ln	891	1707	1497	1156	1796	1547	1767	1841	1485	1725	1841	1560
Q Serve(g_s), s	10.2	9.6	0.0	1.4	18.8	0.0	5.1	11.3	0.0	4.1	14.0	0.0
Cycle Q Clear(g_c), s	29.0	9.6	0.0	11.0	18.8	0.0	5.1	11.3	0.0	4.1	14.0	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	207	599		362	631		451	735		476	712	
V/C Ratio(X)	0.50	0.40		0.06	0.69		0.38	0.43		0.28	0.52	
Avail Cap(c_a), veh/h	238	658		402	693		498	735		544	712	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	22.1	0.0	26.2	25.0	0.0	15.5	19.6	0.0	15.3	21.2	0.0
Incr Delay (d2), s/veh	1.9	0.4	0.0	0.1	2.7	0.0	0.5	1.9	0.0	0.3	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	2.2	3.6	0.0	0.4	7.8	0.0	1.9	4.8	0.0	1.5	6.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.3	22.5	0.0	26.3	27.7	0.0	16.1	21.5	0.0	15.6	24.0	0.0
LnGrp LOS	D	C		C	C		B	C		B	C	
Approach Vol, veh/h		346			460			488			505	
Approach Delay, s/veh		27.6			27.6			19.6			21.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.6	40.3		37.1	11.4	41.5		37.1				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	29.3		34.7	9.5	29.3		34.7				
Max Q Clear Time (g_c+I1), s	7.1	16.0		31.0	6.1	13.3		20.8				
Green Ext Time (p_c), s	0.1	3.0		0.6	0.1	2.7		2.1				

Intersection Summary			
HCM 6th Ctrl Delay		23.8	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	448	1	6	490
Future Vol, veh/h	0	7	448	1	6	490
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	71	4	100	83	4
Mvmt Flow	0	8	498	1	7	544

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1056	498	0	0	499	0
Stage 1	498	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Critical Hdwy	6.4	6.91	-	-	4.93	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.939	-	-	2.947	-
Pot Cap-1 Maneuver	252	456	-	-	751	-
Stage 1	615	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	250	456	-	-	751	-
Mov Cap-2 Maneuver	250	-	-	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	456	751	-
HCM Lane V/C Ratio	-	-	0.017	0.009	-
HCM Control Delay (s)	-	-	13	9.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	447	0	1	492
Future Vol, veh/h	0	1	447	0	1	492
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	-	-	160	240	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	0	0	4
Mvmt Flow	0	1	497	0	1	547

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1046	497	0	0	497	0
Stage 1	497	-	-	-	-	-
Stage 2	549	-	-	-	-	-
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	255	577	-	-	1077	-
Stage 1	615	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	255	577	-	-	1077	-
Mov Cap-2 Maneuver	255	-	-	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	582	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	577	1077	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	11.3	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

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	5	430	45	52	391	0	46	6	32	0	12	1
Future Vol, veh/h	5	430	45	52	391	0	46	6	32	0	12	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	4	2	0	4	0	4	4	0	0	4	0
Mvmt Flow	5	467	49	57	425	0	50	7	35	0	13	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	425	0	0	516	0	0	1048	1041	492	1062	1065	425
Stage 1	-	-	-	-	-	-	502	502	-	539	539	-
Stage 2	-	-	-	-	-	-	546	539	-	523	526	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.14	6.54	6.2	7.1	6.54	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.1	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.1	5.54	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.536	4.036	3.3	3.5	4.036	3.3
Pot Cap-1 Maneuver	1145	-	-	1060	-	-	204	228	581	203	221	634
Stage 1	-	-	-	-	-	-	548	539	-	530	519	-
Stage 2	-	-	-	-	-	-	518	519	-	541	526	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1145	-	-	1060	-	-	183	211	581	176	204	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	183	211	-	176	204	-
Stage 1	-	-	-	-	-	-	545	536	-	527	483	-
Stage 2	-	-	-	-	-	-	468	483	-	499	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1	27.3	22.9
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	251	1145	-	-	1060	-	-	215
HCM Lane V/C Ratio	0.364	0.005	-	-	0.053	-	-	0.066
HCM Control Delay (s)	27.3	8.2	0	-	8.6	0	-	22.9
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.6	0	-	-	0.2	-	-	0.2

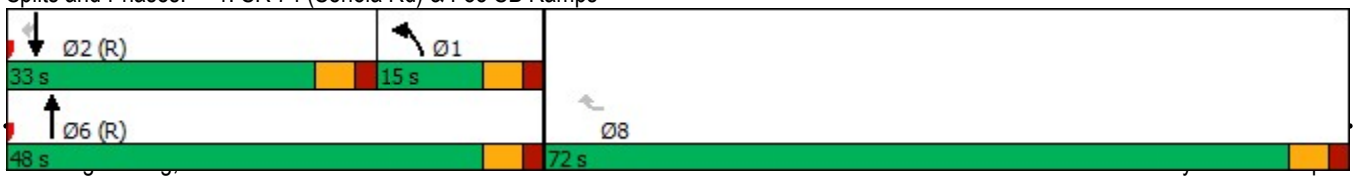
Future “No-Build” Intersection Analysis

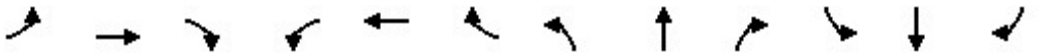
Lane Group	WBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	735	209	665	609	167
Future Volume (vph)	735	209	665	609	167
Lane Group Flow (vph)	808	230	731	669	184
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		1	6	2	
Permitted Phases	8				2
Detector Phase	8	1	6	2	2
Switch Phase					
Minimum Initial (s)	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	30.5	15.0	28.5	28.5	28.5
Total Split (s)	72.0	15.0	48.0	33.0	33.0
Total Split (%)	60.0%	12.5%	40.0%	27.5%	27.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5
Lead/Lag		Lag		Lead	Lead
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	C-Min	C-Min	C-Min
v/c Ratio	1.00	0.89	0.62	0.88	0.36
Control Delay	58.2	69.9	18.8	58.8	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	58.2	69.9	18.8	58.8	7.5
Queue Length 50th (ft)	~578	92	104	264	0
Queue Length 95th (ft)	#873	#164	127	#363	58
Internal Link Dist (ft)			370	1334	
Turn Bay Length (ft)					1000
Base Capacity (vph)	804	258	1183	766	511
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.00	0.89	0.62	0.87	0.36

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, 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: 1: SR 74 (Senoia Rd) & I-85 SB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	735	209	665	0	0	609	167
Future Volume (vph)	0	0	0	0	0	735	209	665	0	0	609	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.5	5.5	5.5			5.5	5.5
Lane Util. Factor						1.00	0.97	0.95			0.95	1.00
Frt						0.86	1.00	1.00			1.00	0.85
Flt Protected						1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)						1393	3213	3343			3343	1615
Flt Permitted						1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)						1393	3213	3343			3343	1615
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	0	0	808	230	731	0	0	669	184
RTOR Reduction (vph)	0	0	0	0	0	33	0	0	0	0	0	142
Lane Group Flow (vph)	0	0	0	0	0	775	230	731	0	0	669	42
Heavy Vehicles (%)	0%	0%	0%	10%	0%	18%	9%	8%	0%	0%	8%	0%
Turn Type						Perm	Prot	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases						8						2
Actuated Green, G (s)						66.5	9.7	42.5			27.3	27.3
Effective Green, g (s)						66.5	9.7	42.5			27.3	27.3
Actuated g/C Ratio						0.55	0.08	0.35			0.23	0.23
Clearance Time (s)						5.5	5.5	5.5			5.5	5.5
Vehicle Extension (s)						3.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)						771	259	1183			760	367
v/s Ratio Prot							c0.07	0.22			c0.20	
v/s Ratio Perm						c0.56						0.03
v/c Ratio						1.01	0.89	0.62			0.88	0.11
Uniform Delay, d1						26.8	54.6	32.0			44.8	36.8
Progression Factor						1.00	0.65	0.51			1.00	1.00
Incremental Delay, d2						33.8	27.1	2.3			13.9	0.6
Delay (s)						60.6	62.8	18.7			58.6	37.4
Level of Service						E	E	B			E	D
Approach Delay (s)		0.0			60.6			29.2			54.0	
Approach LOS		A			E			C			D	

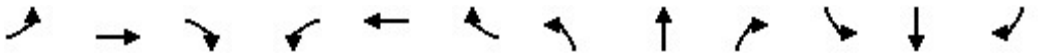
Intersection Summary			
HCM 2000 Control Delay	47.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBR	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	401	216	564	1948	374	1981
Future Volume (vph)	401	216	564	1948	374	1981
Lane Group Flow (vph)	441	237	620	2141	411	2177
Turn Type	Perm	Perm	NA	custom	Prot	NA
Protected Phases			6		5	2
Permitted Phases	4	8		4 6 8		
Detector Phase	4	8	6	4 6 8	5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	15.0		5.0	15.0
Minimum Split (s)	23.5	23.5	28.5		15.0	28.5
Total Split (s)	42.0	42.0	48.0		30.0	78.0
Total Split (%)	35.0%	35.0%	40.0%		25.0%	65.0%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5		5.5	5.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Min		None	C-Min
v/c Ratio	0.85	0.29	0.49	1.02	0.82	0.60
Control Delay	49.6	0.9	30.9	42.1	67.1	10.7
Queue Delay	0.0	0.0	0.0	5.9	0.0	0.0
Total Delay	49.6	0.9	30.9	47.9	67.1	10.7
Queue Length 50th (ft)	274	0	195	~995	163	186
Queue Length 95th (ft)	#456	0	257	#1159	m210	214
Internal Link Dist (ft)			776			570
Turn Bay Length (ft)					470	
Base Capacity (vph)	517	825	1254	2097	558	3656
Starvation Cap Reductn	0	0	0	34	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.29	0.49	1.04	0.74	0.60

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 80
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: 2: SR 74 (Senoia Rd) & I-85 NB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	401	0	0	216	0	564	1948	374	1981	0
Future Volume (vph)	0	0	401	0	0	216	0	564	1948	374	1981	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.5			5.5		5.5	5.5	5.5	5.5	
Lane Util. Factor			1.00			1.00		0.95	0.88	0.97	0.86	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1536			1644		3343	2842	2736	6052	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1536			1644		3343	2842	2736	6052	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	441	0	0	237	0	620	2141	411	2177	0
RTOR Reduction (vph)	0	0	51	0	0	165	0	0	36	0	0	0
Lane Group Flow (vph)	0	0	390	0	0	72	0	620	2105	411	2177	0
Heavy Vehicles (%)	4%	0%	7%	0%	0%	0%	0%	8%	0%	28%	8%	0%
Turn Type			Perm			Perm		NA	custom	Prot	NA	
Protected Phases								6		5	2	
Permitted Phases			4			8			4 6 8			
Actuated Green, G (s)			36.5			36.5		45.0	87.0	22.0	72.5	
Effective Green, g (s)			36.5			36.5		45.0	87.0	22.0	72.5	
Actuated g/C Ratio			0.30			0.30		0.38	0.72	0.18	0.60	
Clearance Time (s)			5.5			5.5		5.5		5.5	5.5	
Vehicle Extension (s)			3.0			3.0		5.0		3.0	5.0	
Lane Grp Cap (vph)			467			500		1253	2060	501	3656	
v/s Ratio Prot								0.19		c0.15	0.36	
v/s Ratio Perm			0.25			0.04			c0.74			
v/c Ratio			0.84			0.14		0.49	1.02	0.82	0.60	
Uniform Delay, d1			39.0			30.4		28.8	16.5	47.1	14.7	
Progression Factor			1.00			1.00		1.00	1.00	1.13	0.67	
Incremental Delay, d2			12.2			0.1		1.4	25.6	10.2	0.7	
Delay (s)			51.2			30.5		30.2	42.1	63.5	10.6	
Level of Service			D			C		C	D	E	B	
Approach Delay (s)		51.2			30.5			39.4			19.0	
Approach LOS		D			C			D			B	

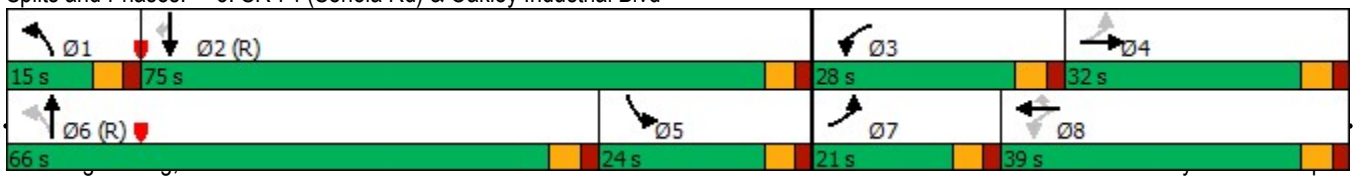
Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

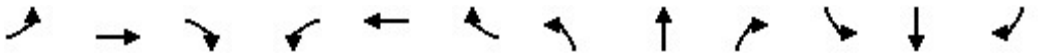
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	172	76	216	86	383	47	1620	487	1776	216
Future Volume (vph)	172	76	216	86	383	47	1620	487	1776	216
Lane Group Flow (vph)	183	103	230	91	407	50	1839	518	1889	230
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	Perm
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	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	41.5	15.0	51.5	51.5	15.0	33.5	15.0	37.5	37.5
Total Split (s)	21.0	32.0	28.0	39.0	39.0	15.0	66.0	24.0	75.0	75.0
Total Split (%)	14.0%	21.3%	18.7%	26.0%	26.0%	10.0%	44.0%	16.0%	50.0%	50.0%
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	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min	C-Min
v/c Ratio	0.69	0.59	0.66	0.38	0.88	0.41	0.64	1.29	0.55	0.28
Control Delay	58.3	70.6	52.4	60.0	36.4	33.7	31.6	199.4	22.9	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.3	70.6	52.4	60.0	36.4	33.7	31.6	199.4	22.9	9.2
Queue Length 50th (ft)	148	91	187	82	113	26	379	~343	337	42
Queue Length 95th (ft)	199	145	241	127	236	60	490	#461	454	114
Internal Link Dist (ft)		365		640			877		776	
Turn Bay Length (ft)	180		195		470	240		376		100
Base Capacity (vph)	268	281	368	375	558	137	2864	400	3451	827
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	0.68	0.37	0.63	0.24	0.73	0.36	0.64	1.29	0.55	0.28

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:SBT 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: 3: SR 74 (Senoia Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	76	21	216	86	383	47	1620	109	487	1776	216
Future Volume (veh/h)	172	76	21	216	86	383	47	1620	109	487	1776	216
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	1559	1618	1663	1856	1707	1752	1618	1781	1722	1693	1781	1604
Adj Flow Rate, veh/h	183	81	0	230	91	0	50	1723	0	518	1889	230
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, %	23	19	16	3	13	10	19	8	12	14	8	20
Cap, veh/h	249	104		303	161		119	2311		871	3829	849
Arrive On Green	0.10	0.06	0.00	0.13	0.09	0.00	0.03	0.38	0.00	0.28	0.62	0.62
Sat Flow, veh/h	1485	1618	0	1767	1707	1485	1541	6378	0	3127	6128	1359
Grp Volume(v), veh/h	183	81	0	230	91	0	50	1723	0	518	1889	230
Grp Sat Flow(s),veh/h/ln	1485	1618	0	1767	1707	1485	1541	1532	0	1564	1532	1359
Q Serve(g_s), s	15.5	7.4	0.0	17.9	7.6	0.0	3.2	36.5	0.0	21.5	25.1	11.5
Cycle Q Clear(g_c), s	15.5	7.4	0.0	17.9	7.6	0.0	3.2	36.5	0.0	21.5	25.1	11.5
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	104		303	161		119	2311		871	3829	849
V/C Ratio(X)	0.74	0.78		0.76	0.56		0.42	0.75		0.59	0.49	0.27
Avail Cap(c_a), veh/h	249	286		333	381		169	2472		871	3829	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	59.7	69.1	0.0	54.8	65.0	0.0	35.9	40.5	0.0	46.8	15.3	12.7
Incr Delay (d2), s/veh	10.8	11.7	0.0	8.9	3.1	0.0	2.3	2.2	0.0	0.8	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	3.4	0.0	8.6	3.4	0.0	1.3	13.8	0.0	8.3	8.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.5	80.8	0.0	63.7	68.0	0.0	38.2	42.7	0.0	47.6	15.6	13.3
LnGrp LOS	E	F		E	E		D	D		D	B	B
Approach Vol, veh/h		264			321			1773			2637	
Approach Delay, s/veh		73.7			64.9			42.6			21.7	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	99.2	25.5	15.2	47.3	62.1	21.0	19.7
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	69.5	22.5	26.5	18.5	60.5	15.5	33.5
Max Q Clear Time (g_c+I1), s	5.2	27.1	19.9	9.4	23.5	38.5	17.5	9.6
Green Ext Time (p_c), s	0.0	35.0	0.2	0.3	0.0	18.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

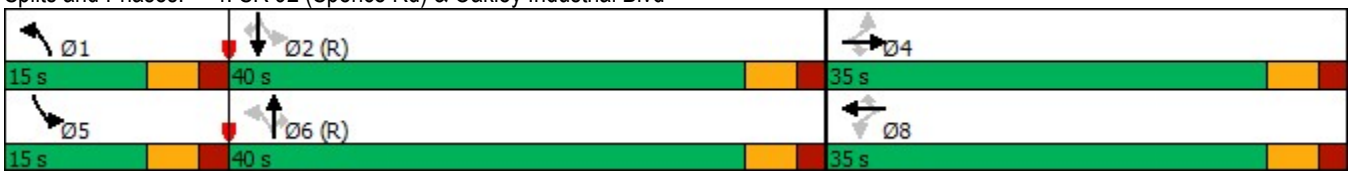
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	297	106	19	227	90	121	354	21	172	368	290
Future Volume (vph)	129	297	106	19	227	90	121	354	21	172	368	290
Lane Group Flow (vph)	152	349	125	22	267	106	142	416	25	202	433	341
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	5	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	5.0	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	15.0	28.5	28.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	15.0	40.0	40.0	15.0	40.0	40.0
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%	16.7%	44.4%	44.4%	16.7%	44.4%	44.4%
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							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.74	0.76	0.29	0.20	0.61	0.22	0.30	0.50	0.04	0.38	0.51	0.39
Control Delay	51.3	41.7	6.2	28.5	34.6	5.9	10.3	21.6	0.1	10.9	21.6	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	41.7	6.2	28.5	34.6	5.9	10.3	21.6	0.1	10.9	21.6	5.4
Queue Length 50th (ft)	79	182	0	10	132	0	31	165	0	45	172	17
Queue Length 95th (ft)	129	236	32	27	179	30	63	259	0	86	272	64
Internal Link Dist (ft)		378			487			2694			846	
Turn Bay Length (ft)	170		170	200		150	175		200	90		115
Base Capacity (vph)	261	582	518	138	561	585	490	833	638	544	842	884
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	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	0.58	0.60	0.24	0.16	0.48	0.18	0.29	0.50	0.04	0.37	0.51	0.39

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 4: SR 92 (Spence Rd) & Oakley Industrial Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	297	106	19	227	90	121	354	21	172	368	290
Future Volume (veh/h)	129	297	106	19	227	90	121	354	21	172	368	290
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	1841	1796	1574	1381	1737	1856	1767	1841	1515	1885	1841	1870
Adj Flow Rate, veh/h	152	349	0	22	267	0	142	416	0	202	433	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	7	22	35	11	3	9	4	26	1	4	2
Cap, veh/h	263	530		175	513		452	806		498	837	
Arrive On Green	0.30	0.30	0.00	0.30	0.30	0.00	0.07	0.44	0.00	0.08	0.45	0.00
Sat Flow, veh/h	1095	1796	1334	762	1737	1572	1682	1841	1284	1795	1841	1585
Grp Volume(v), veh/h	152	349	0	22	267	0	142	416	0	202	433	0
Grp Sat Flow(s),veh/h/ln	1095	1796	1334	762	1737	1572	1682	1841	1284	1795	1841	1585
Q Serve(g_s), s	12.1	15.3	0.0	2.3	11.5	0.0	4.1	14.8	0.0	5.5	15.1	0.0
Cycle Q Clear(g_c), s	23.6	15.3	0.0	17.6	11.5	0.0	4.1	14.8	0.0	5.5	15.1	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	263	530		175	513		452	806		498	837	
V/C Ratio(X)	0.58	0.66		0.13	0.52		0.31	0.52		0.41	0.52	
Avail Cap(c_a), veh/h	299	589		200	569		516	806		537	837	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.3	27.8	0.0	35.5	26.4	0.0	13.3	18.4	0.0	13.1	17.5	0.0
Incr Delay (d2), s/veh	2.1	2.3	0.0	0.3	0.8	0.0	0.4	2.4	0.0	0.5	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	3.2	6.4	0.0	0.4	4.6	0.0	1.4	6.2	0.0	2.0	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	30.1	0.0	35.8	27.2	0.0	13.7	20.7	0.0	13.7	19.8	0.0
LnGrp LOS	D	C		D	C		B	C		B	B	
Approach Vol, veh/h		501			289			558			635	
Approach Delay, s/veh		32.6			27.9			18.9			17.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	46.4		32.1	13.0	44.9		32.1				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	34.5		29.5	9.5	34.5		29.5				
Max Q Clear Time (g_c+I1), s	6.1	17.1		25.6	7.5	16.8		19.6				
Green Ext Time (p_c), s	0.1	4.2		0.9	0.1	4.0		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		23.3	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	492	0	2	388
Future Vol, veh/h	0	3	492	0	2	388
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	100	4	0	100	4
Mvmt Flow	0	3	559	0	2	441

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1004	559	0	0	559	0
Stage 1	559	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.4	7.2	-	-	5.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	-	-	3.1	-
Pot Cap-1 Maneuver	270	381	-	-	663	-
Stage 1	576	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	381	-	-	663	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	576	-	-	-	-	-
Stage 2	648	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	381	663	-
HCM Lane V/C Ratio	-	-	0.009	0.003	-
HCM Control Delay (s)	-	-	14.5	10.4	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	491	0	2	383
Future Vol, veh/h	0	1	491	0	2	383
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	-	-	160	240	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	100	4	0	0	4
Mvmt Flow	0	1	552	0	2	430

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	986	552	0	0	552	0
Stage 1	552	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Critical Hdwy	6.4	7.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	-	-	2.2	-
Pot Cap-1 Maneuver	277	385	-	-	1028	-
Stage 1	581	-	-	-	-	-
Stage 2	658	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	276	385	-	-	1028	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	657	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	385	1028	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	14.4	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	344	32	25	383	1	84	18	22	0	6	4
Future Vol, veh/h	3	344	32	25	383	1	84	18	22	0	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	4	0	9	4	0	1	4	0	0	4	0
Mvmt Flow	3	391	36	28	435	1	95	20	25	0	7	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	436	0	0	427	0	0	913	907	409	930	925	436
Stage 1	-	-	-	-	-	-	415	415	-	492	492	-
Stage 2	-	-	-	-	-	-	498	492	-	438	433	-
Critical Hdwy	4.1	-	-	4.19	-	-	7.11	6.54	6.2	7.1	6.54	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.54	-	6.1	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.54	-	6.1	5.54	-
Follow-up Hdwy	2.2	-	-	2.281	-	-	3.509	4.036	3.3	3.5	4.036	3.3
Pot Cap-1 Maneuver	1134	-	-	1096	-	-	255	274	647	250	267	625
Stage 1	-	-	-	-	-	-	617	589	-	562	544	-
Stage 2	-	-	-	-	-	-	556	544	-	601	578	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1134	-	-	1096	-	-	241	264	647	220	257	625
Mov Cap-2 Maneuver	-	-	-	-	-	-	241	264	-	220	257	-
Stage 1	-	-	-	-	-	-	615	587	-	560	526	-
Stage 2	-	-	-	-	-	-	526	526	-	556	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	31.1	16.1
HCM LOS			D	C

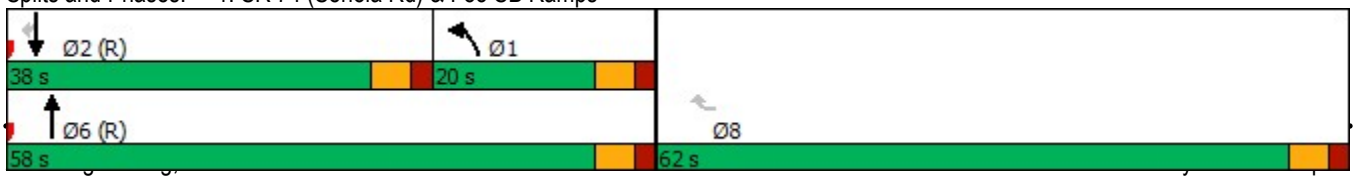
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	275	1134	-	-	1096	-	-	336
HCM Lane V/C Ratio	0.512	0.003	-	-	0.026	-	-	0.034
HCM Control Delay (s)	31.1	8.2	0	-	8.4	0	-	16.1
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2.7	0	-	-	0.1	-	-	0.1

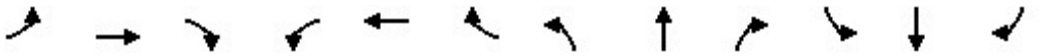
Lane Group	WBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	627	445	793	734	192
Future Volume (vph)	627	445	793	734	192
Lane Group Flow (vph)	653	464	826	765	200
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		1	6	2	
Permitted Phases	8				2
Detector Phase	8	1	6	2	2
Switch Phase					
Minimum Initial (s)	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	30.5	15.0	28.5	28.5	28.5
Total Split (s)	62.0	20.0	58.0	38.0	38.0
Total Split (%)	51.7%	16.7%	48.3%	31.7%	31.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5
Lead/Lag		Lag		Lead	Lead
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.97	1.08	0.55	0.83	0.34
Control Delay	55.2	97.5	15.4	50.2	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	55.2	97.5	15.4	50.2	6.3
Queue Length 50th (ft)	424	~214	97	295	0
Queue Length 95th (ft)	#687	#315	156	#378	57
Internal Link Dist (ft)			370	1334	
Turn Bay Length (ft)					1000
Base Capacity (vph)	692	431	1505	919	589
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.94	1.08	0.55	0.83	0.34

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 90
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: 1: SR 74 (Senoia Rd) & I-85 SB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	627	445	793	0	0	734	192
Future Volume (vph)	0	0	0	0	0	627	445	793	0	0	734	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.5	5.5	5.5			5.5	5.5
Lane Util. Factor						1.00	0.97	0.95			0.95	1.00
Frt						0.86	1.00	1.00			1.00	0.85
Flt Protected						1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)						1370	3335	3343			3343	1615
Flt Permitted						1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)						1370	3335	3343			3343	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	0	0	653	464	826	0	0	765	200
RTOR Reduction (vph)	0	0	0	0	0	48	0	0	0	0	0	145
Lane Group Flow (vph)	0	0	0	0	0	605	464	826	0	0	765	55
Heavy Vehicles (%)	0%	0%	0%	4%	0%	20%	5%	8%	0%	0%	8%	0%
Turn Type						Perm	Prot	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases						8						2
Actuated Green, G (s)						54.9	15.6	54.1			33.0	33.0
Effective Green, g (s)						54.9	15.6	54.1			33.0	33.0
Actuated g/C Ratio						0.46	0.13	0.45			0.28	0.28
Clearance Time (s)						5.5	5.5	5.5			5.5	5.5
Vehicle Extension (s)						3.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)						626	433	1507			919	444
v/s Ratio Prot							c0.14	0.25			c0.23	
v/s Ratio Perm						c0.44						0.03
v/c Ratio						0.97	1.07	0.55			0.83	0.12
Uniform Delay, d1						31.6	52.2	24.0			40.9	32.6
Progression Factor						1.00	0.65	0.57			1.00	1.00
Incremental Delay, d2						27.4	60.5	1.2			8.7	0.6
Delay (s)						59.0	94.3	15.0			49.6	33.2
Level of Service						E	F	B			D	C
Approach Delay (s)		0.0			59.0			43.5			46.2	
Approach LOS		A			E			D			D	

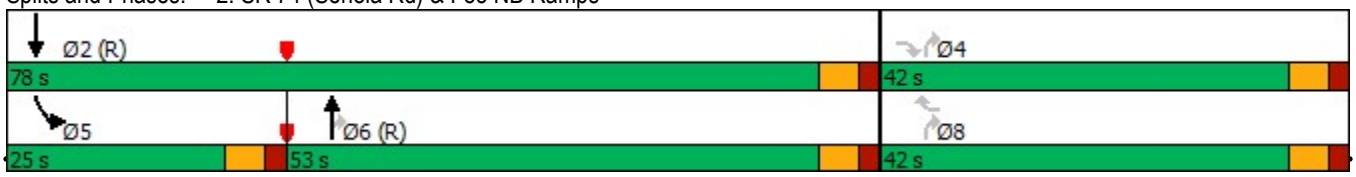
Intersection Summary			
HCM 2000 Control Delay	47.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	102.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

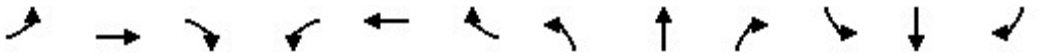
Lane Group	EBR	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	314	212	907	1824	477	2404
Future Volume (vph)	314	212	907	1824	477	2404
Lane Group Flow (vph)	327	221	945	1900	497	2504
Turn Type	Perm	Perm	NA	custom	Prot	NA
Protected Phases			6		5	2
Permitted Phases	4	8		4 6 8		
Detector Phase	4	8	6	4 6 8	5	2
Switch Phase						
Minimum Initial (s)	6.0	5.0	15.0		5.0	15.0
Minimum Split (s)	31.5	23.5	28.5		15.0	28.5
Total Split (s)	42.0	42.0	53.0		25.0	78.0
Total Split (%)	35.0%	35.0%	44.2%		20.8%	65.0%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5		5.5	5.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Min		None	C-Min
v/c Ratio	0.74	0.32	0.69	0.93	0.87	0.64
Control Delay	41.5	1.2	32.9	23.8	68.5	10.7
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0
Total Delay	41.5	1.2	32.9	24.4	68.5	10.7
Queue Length 50th (ft)	177	0	320	597	201	226
Queue Length 95th (ft)	278	0	398	717	m#319	288
Internal Link Dist (ft)			776			570
Turn Bay Length (ft)					470	
Base Capacity (vph)	501	742	1366	2163	573	3920
Starvation Cap Reductn	0	0	0	64	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.30	0.69	0.91	0.87	0.64

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, 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: 2: SR 74 (Senoia Rd) & I-85 NB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	314	0	0	212	0	907	1824	477	2404	0
Future Volume (vph)	0	0	314	0	0	212	0	907	1824	477	2404	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.5			5.5		5.5	5.5	5.5	5.5	
Lane Util. Factor			1.00			1.00		0.95	0.88	0.97	0.86	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1481			1644		3343	2842	2968	6052	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1481			1644		3343	2842	2968	6052	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	327	0	0	221	0	945	1900	497	2504	0
RTOR Reduction (vph)	0	0	54	0	0	163	0	0	8	0	0	0
Lane Group Flow (vph)	0	0	273	0	0	58	0	945	1892	497	2504	0
Heavy Vehicles (%)	15%	0%	11%	0%	0%	0%	0%	8%	0%	18%	8%	0%
Turn Type			Perm			Perm		NA	custom	Prot	NA	
Protected Phases								6		5	2	
Permitted Phases			4			8			4 6 8			
Actuated Green, G (s)			31.3			31.3		49.0	85.8	23.2	77.7	
Effective Green, g (s)			31.3			31.3		49.0	85.8	23.2	77.7	
Actuated g/C Ratio			0.26			0.26		0.41	0.71	0.19	0.65	
Clearance Time (s)			5.5			5.5		5.5		5.5	5.5	
Vehicle Extension (s)			3.0			3.0		5.0		3.0	5.0	
Lane Grp Cap (vph)			386			428		1365	2032	573	3918	
v/s Ratio Prot								0.28		c0.17	0.41	
v/s Ratio Perm			0.18			0.04			c0.67			
v/c Ratio			0.71			0.13		0.69	0.93	0.87	0.64	
Uniform Delay, d1			40.2			34.0		29.3	14.6	46.9	12.7	
Progression Factor			1.00			1.00		1.00	1.00	1.11	0.72	
Incremental Delay, d2			5.8			0.1		2.9	8.4	13.0	0.8	
Delay (s)			46.0			34.1		32.2	22.9	64.9	10.0	
Level of Service			D			C		C	C	E	B	
Approach Delay (s)		46.0			34.1			26.0			19.1	
Approach LOS		D			C			C			B	

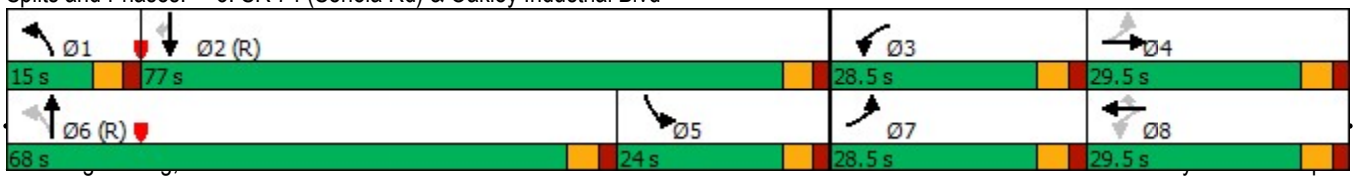
Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

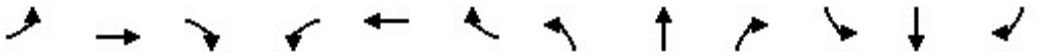
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	217	120	278	112	377	87	1669	510	1991	171
Future Volume (vph)	217	120	278	112	377	87	1669	510	1991	171
Lane Group Flow (vph)	224	161	287	115	389	90	1847	526	2053	176
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	Perm
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	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	41.5	15.0	51.5	51.5	15.0	33.5	15.0	37.5	37.5
Total Split (s)	28.5	29.5	28.5	29.5	29.5	15.0	68.0	24.0	77.0	77.0
Total Split (%)	19.0%	19.7%	19.0%	19.7%	19.7%	10.0%	45.3%	16.0%	51.3%	51.3%
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	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min	C-Min
v/c Ratio	0.66	0.74	0.80	0.50	0.87	0.62	0.68	1.32	0.65	0.24
Control Delay	50.9	78.2	59.9	67.0	37.3	46.8	34.6	209.5	28.2	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.9	78.2	59.9	67.0	37.3	46.8	34.6	209.5	28.2	10.5
Queue Length 50th (ft)	176	146	230	107	103	51	409	~350	427	39
Queue Length 95th (ft)	247	221	309	168	#265	#110	481	#469	497	93
Internal Link Dist (ft)		365		640			877		776	
Turn Bay Length (ft)	180		195		470	240		376		100
Base Capacity (vph)	362	276	367	278	476	152	2705	398	3151	742
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	0.62	0.58	0.78	0.41	0.82	0.59	0.68	1.32	0.65	0.24

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 1 (1%), Referenced to phase 2:SBT 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: 3: SR 74 (Senoia Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	120	36	278	112	377	87	1669	122	510	1991	171
Future Volume (veh/h)	217	120	36	278	112	377	87	1669	122	510	1991	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	1663	1752	1811	1885	1767	1752	1767	1781	1707	1707	1781	1589
Adj Flow Rate, veh/h	224	124	0	287	115	0	90	1721	0	526	2053	176
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, %	16	10	6	1	9	10	9	8	13	13	8	21
Cap, veh/h	311	150		343	172		143	2360		724	3469	762
Arrive On Green	0.14	0.09	0.00	0.15	0.10	0.00	0.05	0.39	0.00	0.23	0.57	0.57
Sat Flow, veh/h	1584	1752	0	1795	1767	1485	1682	6378	0	3155	6128	1346
Grp Volume(v), veh/h	224	124	0	287	115	0	90	1721	0	526	2053	176
Grp Sat Flow(s),veh/h/ln	1584	1752	0	1795	1767	1485	1682	1532	0	1577	1532	1346
Q Serve(g_s), s	19.1	10.5	0.0	21.7	9.4	0.0	5.4	36.0	0.0	23.1	32.8	9.8
Cycle Q Clear(g_c), s	19.1	10.5	0.0	21.7	9.4	0.0	5.4	36.0	0.0	23.1	32.8	9.8
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	150		343	172		143	2360		724	3469	762
V/C Ratio(X)	0.72	0.83		0.84	0.67		0.63	0.73		0.73	0.59	0.23
Avail Cap(c_a), veh/h	330	280		343	283		168	2553		724	3469	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	52.5	67.5	0.0	52.2	65.4	0.0	38.7	39.4	0.0	53.4	21.2	16.2
Incr Delay (d2), s/veh	7.0	11.0	0.0	16.2	4.4	0.0	5.7	2.0	0.0	2.6	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	5.1	0.0	11.1	4.4	0.0	2.4	13.5	0.0	9.3	11.3	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	78.5	0.0	68.4	69.8	0.0	44.4	41.5	0.0	56.1	21.8	16.7
LnGrp LOS	E	E		E	E		D	D		E	C	B
Approach Vol, veh/h		348			402			1811			2755	
Approach Delay, s/veh		66.2			68.8			41.6			28.0	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	90.4	28.5	18.3	39.9	63.3	26.7	20.1
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	71.5	23.0	24.0	18.5	62.5	23.0	24.0
Max Q Clear Time (g_c+I1), s	7.4	34.8	23.7	12.5	25.1	38.0	21.1	11.4
Green Ext Time (p_c), s	0.0	32.2	0.0	0.4	0.0	19.7	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

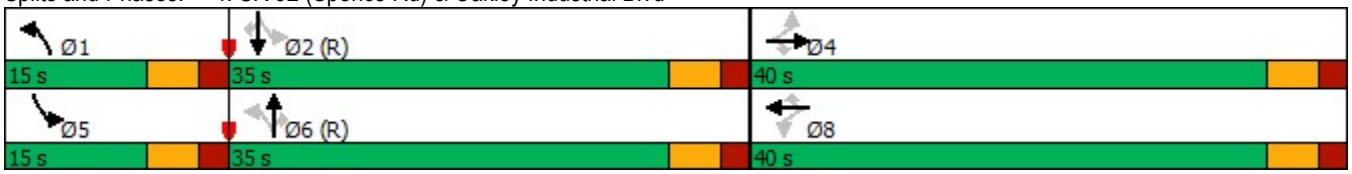
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

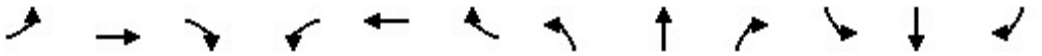
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	244	119	24	440	150	171	320	24	133	376	306
Future Volume (vph)	105	244	119	24	440	150	171	320	24	133	376	306
Lane Group Flow (vph)	117	271	132	27	489	167	190	356	27	148	418	340
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	5	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	5.0	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	15.0	28.5	28.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	15.0	35.0	35.0	15.0	35.0	35.0
Total Split (%)	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	16.7%	38.9%	38.9%	16.7%	38.9%	38.9%
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							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.02	0.49	0.23	0.09	0.84	0.27	0.44	0.50	0.04	0.32	0.59	0.46
Control Delay	121.2	26.6	4.5	19.5	41.2	5.2	15.2	25.4	0.1	13.6	28.1	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.2	26.6	4.5	19.5	41.2	5.2	15.2	25.4	0.1	13.6	28.1	9.5
Queue Length 50th (ft)	65	119	0	10	249	5	53	156	0	40	196	39
Queue Length 95th (ft)	#167	180	35	27	350	43	100	259	0	80	312	117
Internal Link Dist (ft)		378			487			2694			846	
Turn Bay Length (ft)	170		170	200		150	175		200	90		115
Base Capacity (vph)	134	644	649	355	680	685	438	718	636	478	703	744
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	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	0.87	0.42	0.20	0.08	0.72	0.24	0.43	0.50	0.04	0.31	0.59	0.46

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: SR 92 (Spence Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	244	119	24	440	150	171	320	24	133	376	306
Future Volume (veh/h)	105	244	119	24	440	150	171	320	24	133	376	306
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	1752	1707	1767	1900	1796	1826	1856	1841	1752	1811	1841	1841
Adj Flow Rate, veh/h	117	271	0	27	489	0	190	356	0	148	418	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, %	10	13	9	0	7	5	3	4	10	6	4	4
Cap, veh/h	210	654		381	689		384	658		413	631	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.00	0.09	0.36	0.00	0.08	0.34	0.00
Sat Flow, veh/h	850	1707	1497	1126	1796	1547	1767	1841	1485	1725	1841	1560
Grp Volume(v), veh/h	117	271	0	27	489	0	190	356	0	148	418	0
Grp Sat Flow(s),veh/h/ln	850	1707	1497	1126	1796	1547	1767	1841	1485	1725	1841	1560
Q Serve(g_s), s	12.2	10.5	0.0	1.6	20.8	0.0	6.1	13.9	0.0	4.9	17.4	0.0
Cycle Q Clear(g_c), s	32.9	10.5	0.0	12.1	20.8	0.0	6.1	13.9	0.0	4.9	17.4	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	210	654		381	689		384	658		413	631	
V/C Ratio(X)	0.56	0.41		0.07	0.71		0.50	0.54		0.36	0.66	
Avail Cap(c_a), veh/h	210	654		381	689		411	658		464	631	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	20.3	0.0	24.8	23.5	0.0	18.3	23.0	0.0	17.7	25.1	0.0
Incr Delay (d2), s/veh	3.3	0.4	0.0	0.1	3.4	0.0	1.0	3.2	0.0	0.5	5.4	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	2.6	3.9	0.0	0.4	8.6	0.0	2.4	6.1	0.0	1.8	7.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.7	20.8	0.0	24.9	26.9	0.0	19.3	26.2	0.0	18.2	30.5	0.0
LnGrp LOS	D	C		C	C		B	C		B	C	
Approach Vol, veh/h		388			516			546			566	
Approach Delay, s/veh		26.8			26.8			23.8			27.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.6	36.4		40.0	12.3	37.7		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	29.5		34.5	9.5	29.5		34.5				
Max Q Clear Time (g_c+I1), s	8.1	19.4		34.9	6.9	15.9		22.8				
Green Ext Time (p_c), s	0.1	2.9		0.0	0.1	2.9		2.3				

Intersection Summary			
HCM 6th Ctrl Delay		26.1	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	8	502	1	7	549
Future Vol, veh/h	0	8	502	1	7	549
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	71	4	100	83	4
Mvmt Flow	0	9	558	1	8	610

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1184	558	0	0	559	0
Stage 1	558	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Critical Hdwy	6.4	6.91	-	-	4.93	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.939	-	-	2.947	-
Pot Cap-1 Maneuver	211	418	-	-	708	-
Stage 1	577	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	209	418	-	-	708	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	577	-	-	-	-	-
Stage 2	531	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	418	708	-
HCM Lane V/C Ratio	-	-	0.021	0.011	-
HCM Control Delay (s)	-	-	13.8	10.1	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	501	0	1	551
Future Vol, veh/h	0	1	501	0	1	551
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	-	-	160	240	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	0	0	4
Mvmt Flow	0	1	557	0	1	612

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1171	557	0	0	557	0
Stage 1	557	-	-	-	-	-
Stage 2	614	-	-	-	-	-
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	215	534	-	-	1024	-
Stage 1	578	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	215	534	-	-	1024	-
Mov Cap-2 Maneuver	215	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	543	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	534	1024	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	11.8	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	482	50	58	438	0	52	7	36	0	13	1
Future Vol, veh/h	6	482	50	58	438	0	52	7	36	0	13	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	4	2	0	4	0	4	4	0	0	4	0
Mvmt Flow	7	524	54	63	476	0	57	8	39	0	14	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	476	0	0	578	0	0	1175	1167	551	1191	1194	476
Stage 1	-	-	-	-	-	-	565	565	-	602	602	-
Stage 2	-	-	-	-	-	-	610	602	-	589	592	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.14	6.54	6.2	7.1	6.54	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.1	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.1	5.54	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.536	4.036	3.3	3.5	4.036	3.3
Pot Cap-1 Maneuver	1097	-	-	1006	-	-	167	192	538	166	185	593
Stage 1	-	-	-	-	-	-	506	505	-	490	486	-
Stage 2	-	-	-	-	-	-	478	486	-	498	491	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1097	-	-	1006	-	-	145	174	538	138	168	593
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	174	-	138	168	-
Stage 1	-	-	-	-	-	-	501	500	-	486	445	-
Stage 2	-	-	-	-	-	-	423	445	-	451	487	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1	39.5	27.2
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	204	1097	-	-	1006	-	-	177
HCM Lane V/C Ratio	0.506	0.006	-	-	0.063	-	-	0.086
HCM Control Delay (s)	39.5	8.3	0	-	8.8	0	-	27.2
HCM Lane LOS	E	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	2.6	0	-	-	0.2	-	-	0.3

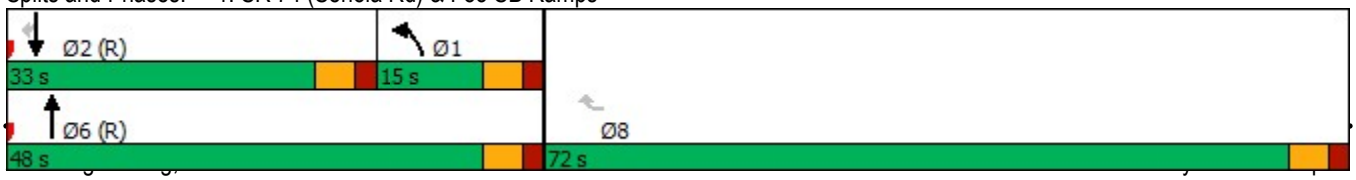
Future “Build” Intersection Analysis

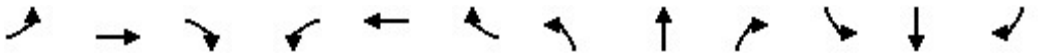
Lane Group	WBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	735	223	679	613	167
Future Volume (vph)	735	223	679	613	167
Lane Group Flow (vph)	808	245	746	674	184
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		1	6	2	
Permitted Phases	8				2
Detector Phase	8	1	6	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	15.0	28.5	28.5	28.5
Total Split (s)	72.0	15.0	48.0	33.0	33.0
Total Split (%)	60.0%	12.5%	40.0%	27.5%	27.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5
Lead/Lag		Lag		Lead	Lead
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	C-Min	C-Min	C-Min
v/c Ratio	1.00	0.95	0.63	0.88	0.36
Control Delay	58.2	83.2	20.6	59.2	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	58.2	83.2	20.6	59.2	7.5
Queue Length 50th (ft)	~578	99	114	266	0
Queue Length 95th (ft)	#873	#178	139	#367	58
Internal Link Dist (ft)			344	1334	
Turn Bay Length (ft)					1000
Base Capacity (vph)	804	257	1183	766	511
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.00	0.95	0.63	0.88	0.36

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, 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: 1: SR 74 (Senoia Rd) & I-85 SB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	735	223	679	0	0	613	167
Future Volume (vph)	0	0	0	0	0	735	223	679	0	0	613	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.5	5.5	5.5			5.5	5.5
Lane Util. Factor						1.00	0.97	0.95			0.95	1.00
Frt						0.86	1.00	1.00			1.00	0.85
Flt Protected						1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)						1393	3213	3343			3343	1615
Flt Permitted						1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)						1393	3213	3343			3343	1615
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	0	0	808	245	746	0	0	674	184
RTOR Reduction (vph)	0	0	0	0	0	33	0	0	0	0	0	142
Lane Group Flow (vph)	0	0	0	0	0	775	245	746	0	0	674	42
Heavy Vehicles (%)	0%	0%	0%	10%	0%	18%	9%	8%	0%	0%	8%	0%
Turn Type						Perm	Prot	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases						8						2
Actuated Green, G (s)						66.5	9.6	42.5			27.4	27.4
Effective Green, g (s)						66.5	9.6	42.5			27.4	27.4
Actuated g/C Ratio						0.55	0.08	0.35			0.23	0.23
Clearance Time (s)						5.5	5.5	5.5			5.5	5.5
Vehicle Extension (s)						3.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)						771	257	1183			763	368
v/s Ratio Prot							c0.08	0.22			c0.20	
v/s Ratio Perm						c0.56						0.03
v/c Ratio						1.01	0.95	0.63			0.88	0.11
Uniform Delay, d1						26.8	55.0	32.2			44.8	36.7
Progression Factor						1.00	0.67	0.56			1.00	1.00
Incremental Delay, d2						33.8	41.4	2.4			14.1	0.6
Delay (s)						60.6	78.3	20.4			58.8	37.3
Level of Service						E	E	C			E	D
Approach Delay (s)		0.0			60.6			34.7			54.2	
Approach LOS		A			E			C			D	

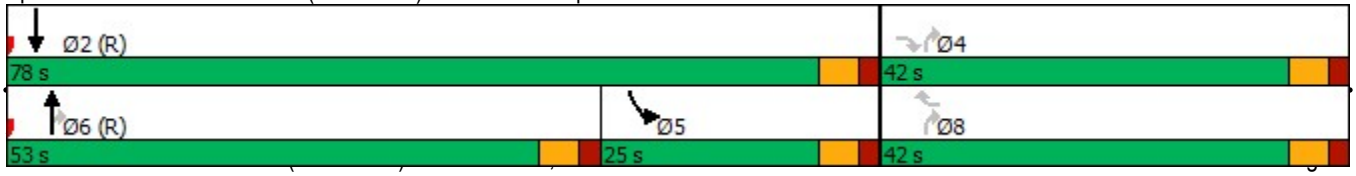
Intersection Summary			
HCM 2000 Control Delay	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

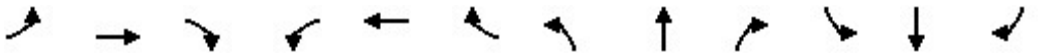
Lane Group	EBR	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	405	216	592	2004	374	2003
Future Volume (vph)	405	216	592	2004	374	2003
Lane Group Flow (vph)	445	237	651	2202	411	2201
Turn Type	Perm	Perm	NA	custom	Prot	NA
Protected Phases			6		5	2
Permitted Phases	4	8		4 6 8		
Detector Phase	4	8	6	4 6 8	5	2
Switch Phase						
Minimum Initial (s)	6.0	5.0	15.0		5.0	15.0
Minimum Split (s)	31.5	23.5	28.5		15.0	28.5
Total Split (s)	42.0	42.0	53.0		25.0	78.0
Total Split (%)	35.0%	35.0%	44.2%		20.8%	65.0%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5		5.5	5.5
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Min		None	C-Min
v/c Ratio	0.86	0.30	0.49	1.03	0.93	0.60
Control Delay	50.4	1.0	28.8	44.1	73.4	10.4
Queue Delay	0.0	0.0	0.0	9.0	0.0	0.0
Total Delay	50.4	1.0	28.8	53.2	73.4	10.4
Queue Length 50th (ft)	278	0	196	~1032	167	187
Queue Length 95th (ft)	#464	0	252	#1181	m#248	207
Internal Link Dist (ft)			776			596
Turn Bay Length (ft)					470	
Base Capacity (vph)	517	782	1323	2135	444	3656
Starvation Cap Reductn	0	0	0	48	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.30	0.49	1.06	0.93	0.60

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 80
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: 2: SR 74 (Senoia Rd) & I-85 NB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	405	0	0	216	0	592	2004	374	2003	0
Future Volume (vph)	0	0	405	0	0	216	0	592	2004	374	2003	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.5			5.5		5.5	5.5	5.5	5.5	
Lane Util. Factor			1.00			1.00		0.95	0.88	0.97	0.86	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1536			1644		3343	2842	2736	6052	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1536			1644		3343	2842	2736	6052	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	445	0	0	237	0	651	2202	411	2201	0
RTOR Reduction (vph)	0	0	51	0	0	165	0	0	16	0	0	0
Lane Group Flow (vph)	0	0	394	0	0	72	0	651	2186	411	2201	0
Heavy Vehicles (%)	4%	0%	7%	0%	0%	0%	0%	8%	0%	28%	8%	0%
Turn Type			Perm			Perm		NA	custom	Prot	NA	
Protected Phases								6		5	2	
Permitted Phases			4			8			4 6 8			
Actuated Green, G (s)			36.5			36.5		47.5	89.5	19.5	72.5	
Effective Green, g (s)			36.5			36.5		47.5	89.5	19.5	72.5	
Actuated g/C Ratio			0.30			0.30		0.40	0.75	0.16	0.60	
Clearance Time (s)			5.5			5.5		5.5		5.5	5.5	
Vehicle Extension (s)			3.0			3.0		5.0		3.0	5.0	
Lane Grp Cap (vph)			467			500		1323	2119	444	3656	
v/s Ratio Prot								0.19		c0.15	0.36	
v/s Ratio Perm			0.26			0.04			c0.77			
v/c Ratio			0.84			0.14		0.49	1.03	0.93	0.60	
Uniform Delay, d1			39.1			30.4		27.2	15.2	49.5	14.8	
Progression Factor			1.00			1.00		1.00	1.00	0.92	0.65	
Incremental Delay, d2			13.1			0.1		1.3	28.2	24.9	0.7	
Delay (s)			52.2			30.5		28.5	43.5	70.2	10.3	
Level of Service			D			C		C	D	E	B	
Approach Delay (s)		52.2			30.5			40.0			19.8	
Approach LOS		D			C			D			B	

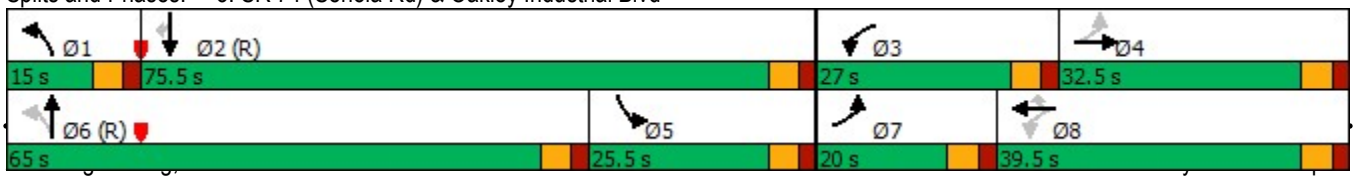
Intersection Summary			
HCM 2000 Control Delay	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

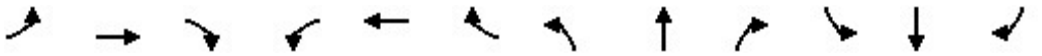
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	172	80	244	100	466	47	1620	513	1776	216
Future Volume (vph)	172	80	244	100	466	47	1620	513	1776	216
Lane Group Flow (vph)	183	107	260	106	496	50	1849	546	1889	230
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	Perm
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	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	41.5	15.0	51.5	51.5	15.0	33.5	15.0	37.5	37.5
Total Split (s)	20.0	32.5	27.0	39.5	39.5	15.0	65.0	25.5	75.5	75.5
Total Split (%)	13.3%	21.7%	18.0%	26.3%	26.3%	10.0%	43.3%	17.0%	50.3%	50.3%
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	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min	C-Min
v/c Ratio	0.63	0.47	0.66	0.35	0.95	0.41	0.70	1.32	0.58	0.29
Control Delay	50.9	59.9	48.7	54.6	50.3	36.9	36.7	206.8	26.4	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.9	59.9	48.7	54.6	50.3	36.9	36.7	206.8	26.4	10.2
Queue Length 50th (ft)	134	88	195	88	198	30	442	~356	393	49
Queue Length 95th (ft)	200	148	274	144	#402	60	500	#476	451	113
Internal Link Dist (ft)		365		640			877		776	
Turn Bay Length (ft)	180		195		470	240		376		100
Base Capacity (vph)	292	286	403	381	573	137	2633	415	3243	785
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	0.63	0.37	0.65	0.28	0.87	0.36	0.70	1.32	0.58	0.29

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 148 (99%), Referenced to phase 2:SBT 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: 3: SR 74 (Senoia Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	80	21	244	100	466	47	1620	118	513	1776	216
Future Volume (veh/h)	172	80	21	244	100	466	47	1620	118	513	1776	216
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	1559	1618	1663	1856	1707	1752	1618	1781	1722	1693	1781	1604
Adj Flow Rate, veh/h	183	85	0	260	106	0	50	1723	0	546	1889	230
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, %	23	19	16	3	13	10	19	8	12	14	8	20
Cap, veh/h	250	108		321	194		118	2285		845	3751	832
Arrive On Green	0.10	0.07	0.00	0.14	0.11	0.00	0.03	0.37	0.00	0.27	0.61	0.61
Sat Flow, veh/h	1485	1618	0	1767	1707	1485	1541	6378	0	3127	6128	1359
Grp Volume(v), veh/h	183	85	0	260	106	0	50	1723	0	546	1889	230
Grp Sat Flow(s),veh/h/ln	1485	1618	0	1767	1707	1485	1541	1532	0	1564	1532	1359
Q Serve(g_s), s	14.5	7.8	0.0	20.1	8.8	0.0	3.3	36.8	0.0	23.2	25.9	11.9
Cycle Q Clear(g_c), s	14.5	7.8	0.0	20.1	8.8	0.0	3.3	36.8	0.0	23.2	25.9	11.9
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	108		321	194		118	2285		845	3751	832
V/C Ratio(X)	0.73	0.78		0.81	0.55		0.43	0.75		0.65	0.50	0.28
Avail Cap(c_a), veh/h	250	291		321	387		168	2431		845	3751	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	60.3	68.9	0.0	53.4	62.8	0.0	36.5	41.0	0.0	48.4	16.3	13.6
Incr Delay (d2), s/veh	10.4	11.7	0.0	14.3	2.4	0.0	2.4	2.4	0.0	1.2	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	3.5	0.0	10.0	3.9	0.0	1.3	13.9	0.0	9.0	8.7	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.7	80.6	0.0	67.7	65.2	0.0	38.9	43.4	0.0	49.6	16.7	14.2
LnGrp LOS	E	F		E	E		D	D		D	B	B
Approach Vol, veh/h		268			366			1773			2665	
Approach Delay, s/veh		73.8			67.0			43.3			23.2	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	97.3	27.0	15.5	46.0	61.4	20.0	22.5
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	70.0	21.5	27.0	20.0	59.5	14.5	34.0
Max Q Clear Time (g_c+I1), s	5.3	27.9	22.1	9.8	25.2	38.8	16.5	10.8
Green Ext Time (p_c), s	0.0	34.8	0.0	0.3	0.0	17.1	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

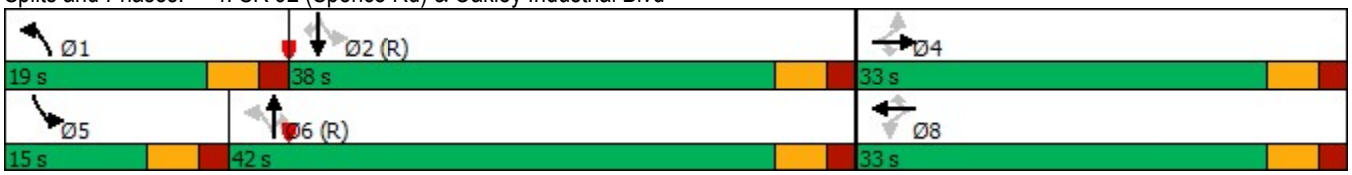
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	297	145	36	227	90	246	396	77	172	381	290
Future Volume (vph)	129	297	145	36	227	90	246	396	77	172	381	290
Lane Group Flow (vph)	152	349	171	42	267	106	289	466	91	202	448	341
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	5	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	5.0	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	15.0	28.5	28.5
Total Split (s)	33.0	33.0	33.0	33.0	33.0	33.0	19.0	42.0	42.0	15.0	38.0	38.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	21.1%	46.7%	46.7%	16.7%	42.2%	42.2%
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							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.76	0.78	0.37	0.41	0.62	0.22	0.59	0.53	0.14	0.41	0.56	0.41
Control Delay	55.2	43.4	6.4	38.9	35.6	6.1	13.9	21.4	4.0	11.4	24.7	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.2	43.4	6.4	38.9	35.6	6.1	13.9	21.4	4.0	11.4	24.7	6.9
Queue Length 50th (ft)	79	182	0	20	133	0	70	189	0	45	195	26
Queue Length 95th (ft)	134	245	38	47	186	31	118	282	23	81	291	78
Internal Link Dist (ft)		378			487			2327			846	
Turn Bay Length (ft)	170		170	200		150	175		200	90		115
Base Capacity (vph)	241	542	523	125	523	552	507	876	648	508	798	825
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	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	0.63	0.64	0.33	0.34	0.51	0.19	0.57	0.53	0.14	0.40	0.56	0.41

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 4: SR 92 (Spence Rd) & Oakley Industrial Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	297	145	36	227	90	246	396	77	172	381	290
Future Volume (veh/h)	129	297	145	36	227	90	246	396	77	172	381	290
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	1841	1796	1574	1381	1737	1856	1767	1885	1515	1885	1885	1870
Adj Flow Rate, veh/h	152	349	0	42	267	0	289	466	0	202	448	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	7	22	35	11	3	9	1	26	1	1	2
Cap, veh/h	258	523		172	506		479	826		474	758	
Arrive On Green	0.29	0.29	0.00	0.29	0.29	0.00	0.12	0.44	0.00	0.09	0.40	0.00
Sat Flow, veh/h	1095	1796	1334	762	1737	1572	1682	1885	1284	1795	1885	1585
Grp Volume(v), veh/h	152	349	0	42	267	0	289	466	0	202	448	0
Grp Sat Flow(s),veh/h/ln	1095	1796	1334	762	1737	1572	1682	1885	1284	1795	1885	1585
Q Serve(g_s), s	12.2	15.4	0.0	4.6	11.6	0.0	8.9	16.6	0.0	5.8	16.8	0.0
Cycle Q Clear(g_c), s	23.7	15.4	0.0	20.0	11.6	0.0	8.9	16.6	0.0	5.8	16.8	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	258	523		172	506		479	826		474	758	
V/C Ratio(X)	0.59	0.67		0.24	0.53		0.60	0.56		0.43	0.59	
Avail Cap(c_a), veh/h	274	549		183	531		525	826		506	758	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.6	28.1	0.0	36.8	26.7	0.0	14.6	18.9	0.0	14.5	21.1	0.0
Incr Delay (d2), s/veh	3.0	2.9	0.0	0.7	0.9	0.0	1.7	2.8	0.0	0.6	3.4	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	3.3	6.5	0.0	0.9	4.6	0.0	3.1	7.1	0.0	2.2	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	31.0	0.0	37.6	27.6	0.0	16.2	21.7	0.0	15.1	24.5	0.0
LnGrp LOS	D	C		D	C		B	C		B	C	
Approach Vol, veh/h		501			309			755			650	
Approach Delay, s/veh		33.6			28.9			19.6			21.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	41.7		31.7	13.4	44.9		31.7				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	13.5	32.5		27.5	9.5	36.5		27.5				
Max Q Clear Time (g_c+I1), s	10.9	18.8		25.7	7.8	18.6		22.0				
Green Ext Time (p_c), s	0.2	3.8		0.5	0.1	4.6		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		24.6	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	35.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	222	0	28	0	0	3	17	492	0	2	416	24
Future Vol, veh/h	222	0	28	0	0	3	17	492	0	2	416	24
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	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	165	-	0	235	-	175
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	0	2	100	2	4	0	100	4	2
Mvmt Flow	241	0	30	0	0	3	19	559	0	2	473	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1076	1074	473	1088	1101	559	500	0	0	559	0	0
Stage 1	477	477	-	597	597	-	-	-	-	-	-	-
Stage 2	599	597	-	491	504	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	7.2	4.12	-	-	5.1	-	-
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	4.2	2.218	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 197	220	591	195	212	381	1064	-	-	663	-	-
Stage 1	569	556	-	493	491	-	-	-	-	-	-	-
Stage 2	488	491	-	563	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 192	215	591	182	208	381	1064	-	-	663	-	-
Mov Cap-2 Maneuver	~ 192	215	-	310	323	-	-	-	-	-	-	-
Stage 1	559	554	-	484	482	-	-	-	-	-	-	-
Stage 2	475	482	-	532	539	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	178.5	14.5	0.3	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1064	-	-	192	591	381	663	-	-
HCM Lane V/C Ratio	0.018	-	-	1.257	0.051	0.009	0.003	-	-
HCM Control Delay (s)	8.4	-	-	199.6	11.4	14.5	10.4	-	-
HCM Lane LOS	A	-	-	F	B	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	13.1	0.2	0	0	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	508	0	2	439
Future Vol, veh/h	0	1	508	0	2	439
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	-	-	160	165	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	100	4	0	0	4
Mvmt Flow	0	1	571	0	2	493

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1068	571	0	0	571	0
Stage 1	571	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.4	7.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	-	-	2.2	-
Pot Cap-1 Maneuver	248	375	-	-	1012	-
Stage 1	569	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	248	375	-	-	1012	-
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	614	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	375	1012	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	14.6	8.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	386	46	25	396	1	88	18	22	0	6	4
Future Vol, veh/h	3	386	46	25	396	1	88	18	22	0	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	4	0	9	4	0	1	4	0	0	4	0
Mvmt Flow	3	439	52	28	450	1	100	20	25	0	7	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	451	0	0	491	0	0	984	978	465	1001	1004	451
Stage 1	-	-	-	-	-	-	471	471	-	507	507	-
Stage 2	-	-	-	-	-	-	513	507	-	494	497	-
Critical Hdwy	4.1	-	-	4.19	-	-	7.11	6.54	6.2	7.1	6.54	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.54	-	6.1	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.54	-	6.1	5.54	-
Follow-up Hdwy	2.2	-	-	2.281	-	-	3.509	4.036	3.3	3.5	4.036	3.3
Pot Cap-1 Maneuver	1120	-	-	1037	-	-	228	248	602	223	240	613
Stage 1	-	-	-	-	-	-	575	556	-	552	536	-
Stage 2	-	-	-	-	-	-	546	536	-	561	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1120	-	-	1037	-	-	215	238	602	194	230	613
Mov Cap-2 Maneuver	-	-	-	-	-	-	215	238	-	194	230	-
Stage 1	-	-	-	-	-	-	573	554	-	550	517	-
Stage 2	-	-	-	-	-	-	516	517	-	516	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	39.1	17.2
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	245	1120	-	-	1037	-	-	307
HCM Lane V/C Ratio	0.594	0.003	-	-	0.027	-	-	0.037
HCM Control Delay (s)	39.1	8.2	0	-	8.6	0	-	17.2
HCM Lane LOS	E	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.4	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	28	0	717	414	45
Future Vol, veh/h	0	28	0	717	414	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	4	4	2
Mvmt Flow	0	30	0	779	450	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	450	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	609	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	609	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

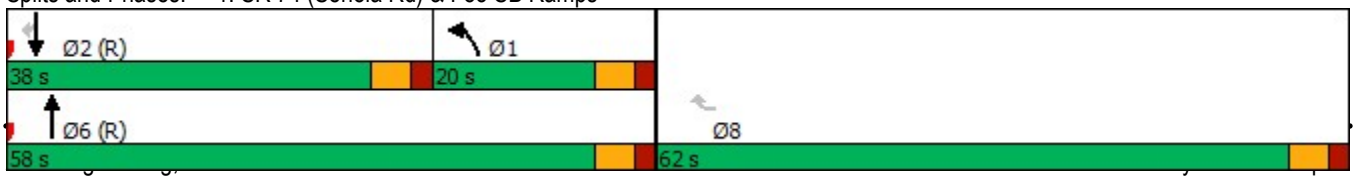
Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	609	-
HCM Lane V/C Ratio	-	0.05	-
HCM Control Delay (s)	-	11.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.2	-

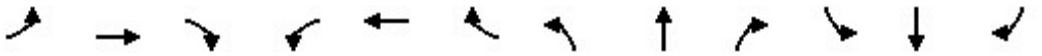
Lane Group	WBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	627	452	800	744	192
Future Volume (vph)	627	452	800	744	192
Lane Group Flow (vph)	653	471	833	775	200
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		1	6	2	
Permitted Phases	8				2
Detector Phase	8	1	6	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	15.0	28.5	28.5	28.5
Total Split (s)	62.0	20.0	58.0	38.0	38.0
Total Split (%)	51.7%	16.7%	48.3%	31.7%	31.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5
Lead/Lag		Lag		Lead	Lead
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.97	1.10	0.55	0.84	0.34
Control Delay	55.5	105.4	16.0	50.8	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	105.4	16.0	50.8	6.3
Queue Length 50th (ft)	425	~220	101	300	0
Queue Length 95th (ft)	#689	#323	162	#398	57
Internal Link Dist (ft)			344	1334	
Turn Bay Length (ft)					1000
Base Capacity (vph)	691	428	1504	921	590
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.95	1.10	0.55	0.84	0.34

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 90
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: 1: SR 74 (Senoia Rd) & I-85 SB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	627	452	800	0	0	744	192
Future Volume (vph)	0	0	0	0	0	627	452	800	0	0	744	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.5	5.5	5.5			5.5	5.5
Lane Util. Factor						1.00	0.97	0.95			0.95	1.00
Frt						0.86	1.00	1.00			1.00	0.85
Flt Protected						1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)						1370	3335	3343			3343	1615
Flt Permitted						1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)						1370	3335	3343			3343	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	0	0	653	471	833	0	0	775	200
RTOR Reduction (vph)	0	0	0	0	0	47	0	0	0	0	0	145
Lane Group Flow (vph)	0	0	0	0	0	606	471	833	0	0	775	55
Heavy Vehicles (%)	0%	0%	0%	4%	0%	20%	5%	8%	0%	0%	8%	0%
Turn Type						Perm	Prot	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases						8						2
Actuated Green, G (s)						55.0	15.4	54.0			33.1	33.1
Effective Green, g (s)						55.0	15.4	54.0			33.1	33.1
Actuated g/C Ratio						0.46	0.13	0.45			0.28	0.28
Clearance Time (s)						5.5	5.5	5.5			5.5	5.5
Vehicle Extension (s)						3.0	3.0	5.0			5.0	5.0
Lane Grp Cap (vph)						627	427	1504			922	445
v/s Ratio Prot							c0.14	0.25			c0.23	
v/s Ratio Perm						c0.44						0.03
v/c Ratio						0.97	1.10	0.55			0.84	0.12
Uniform Delay, d1						31.6	52.3	24.2			41.0	32.6
Progression Factor						1.00	0.66	0.59			1.00	1.00
Incremental Delay, d2						27.4	71.4	1.3			9.1	0.6
Delay (s)						59.0	105.7	15.6			50.1	33.2
Level of Service						E	F	B			D	C
Approach Delay (s)		0.0			59.0			48.1			46.6	
Approach LOS		A			E			D			D	

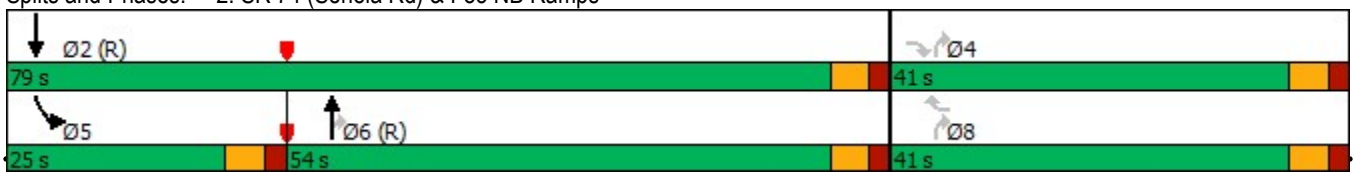
Intersection Summary			
HCM 2000 Control Delay	50.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

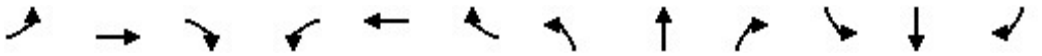
Lane Group	EBR	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	324	212	920	1851	477	2456
Future Volume (vph)	324	212	920	1851	477	2456
Lane Group Flow (vph)	338	221	958	1928	497	2558
Turn Type	Perm	Perm	NA	custom	Prot	NA
Protected Phases			6		5	2
Permitted Phases	4	8		4 6 8		
Detector Phase	4	8	6	4 6 8	5	2
Switch Phase						
Minimum Initial (s)	6.0	5.0	15.0		5.0	15.0
Minimum Split (s)	31.5	23.5	28.5		15.0	28.5
Total Split (s)	41.0	41.0	54.0		25.0	79.0
Total Split (%)	34.2%	34.2%	45.0%		20.8%	65.8%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5		5.5	5.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Min		None	C-Min
v/c Ratio	0.77	0.32	0.69	0.94	0.89	0.65
Control Delay	43.6	1.3	32.4	24.3	72.3	10.4
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0
Total Delay	43.6	1.3	32.4	25.1	72.3	10.4
Queue Length 50th (ft)	185	0	321	586	204	236
Queue Length 95th (ft)	295	0	399	754	m#318	282
Internal Link Dist (ft)			776			596
Turn Bay Length (ft)					470	
Base Capacity (vph)	489	729	1385	2156	556	3919
Starvation Cap Reductn	0	0	0	70	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.30	0.69	0.92	0.89	0.65

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, 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: 2: SR 74 (Senoia Rd) & I-85 NB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	324	0	0	212	0	920	1851	477	2456	0
Future Volume (vph)	0	0	324	0	0	212	0	920	1851	477	2456	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.5			5.5		5.5	5.5	5.5	5.5	
Lane Util. Factor			1.00			1.00		0.95	0.88	0.97	0.86	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1481			1644		3343	2842	2968	6052	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1481			1644		3343	2842	2968	6052	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	338	0	0	221	0	958	1928	497	2558	0
RTOR Reduction (vph)	0	0	54	0	0	163	0	0	8	0	0	0
Lane Group Flow (vph)	0	0	284	0	0	58	0	958	1920	497	2558	0
Heavy Vehicles (%)	15%	0%	11%	0%	0%	0%	0%	8%	0%	18%	8%	0%
Turn Type			Perm			Perm		NA	custom	Prot	NA	
Protected Phases								6		5	2	
Permitted Phases			4			8			4 6 8			
Actuated Green, G (s)			31.3			31.3		49.7	86.5	22.5	77.7	
Effective Green, g (s)			31.3			31.3		49.7	86.5	22.5	77.7	
Actuated g/C Ratio			0.26			0.26		0.41	0.72	0.19	0.65	
Clearance Time (s)			5.5			5.5		5.5		5.5	5.5	
Vehicle Extension (s)			3.0			3.0		5.0		3.0	5.0	
Lane Grp Cap (vph)			386			428		1384	2048	556	3918	
v/s Ratio Prot								0.29		c0.17	0.42	
v/s Ratio Perm			0.19			0.04			c0.68			
v/c Ratio			0.74			0.13		0.69	0.94	0.89	0.65	
Uniform Delay, d1			40.6			34.0		28.9	14.4	47.6	12.9	
Progression Factor			1.00			1.00		1.00	1.00	1.11	0.70	
Incremental Delay, d2			7.1			0.1		2.9	8.9	16.5	0.8	
Delay (s)			47.7			34.1		31.7	23.3	69.2	9.9	
Level of Service			D			C		C	C	E	A	
Approach Delay (s)		47.7			34.1			26.1			19.5	
Approach LOS		D			C			C			B	

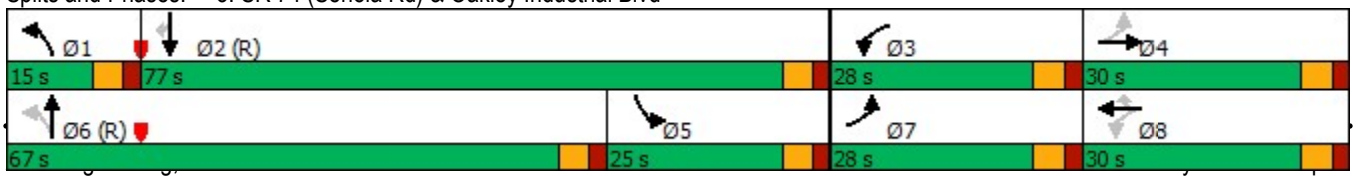
Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

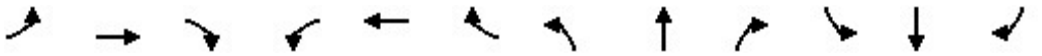
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	217	130	291	119	417	87	1669	572	1991	171
Future Volume (vph)	217	130	291	119	417	87	1669	572	1991	171
Lane Group Flow (vph)	224	171	300	123	430	90	1868	590	2053	176
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	Perm
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	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	5.0	6.0	6.0	5.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	41.5	15.0	51.5	51.5	15.0	33.5	15.0	37.5	37.5
Total Split (s)	28.0	30.0	28.0	30.0	30.0	15.0	67.0	25.0	77.0	77.0
Total Split (%)	18.7%	20.0%	18.7%	20.0%	20.0%	10.0%	44.7%	16.7%	51.3%	51.3%
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	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min	C-Min
v/c Ratio	0.65	0.72	0.83	0.48	0.92	0.62	0.71	1.46	0.66	0.24
Control Delay	49.3	75.6	61.2	65.0	44.3	48.2	36.6	263.7	29.3	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	75.6	61.2	65.0	44.3	48.2	36.6	263.7	29.3	10.8
Queue Length 50th (ft)	166	150	229	110	138	55	449	~406	455	42
Queue Length 95th (ft)	247	233	#341	178	#335	#107	495	#528	497	93
Internal Link Dist (ft)		365		640			877		776	
Turn Bay Length (ft)	180		195		470	240		376		100
Base Capacity (vph)	366	281	368	284	489	150	2627	404	3095	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	0.61	0.61	0.82	0.43	0.88	0.60	0.71	1.46	0.66	0.24

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:SBT 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: 3: SR 74 (Senoia Rd) & Oakley Industrial Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	130	36	291	119	417	87	1669	143	572	1991	171
Future Volume (veh/h)	217	130	36	291	119	417	87	1669	143	572	1991	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	1663	1752	1811	1885	1767	1752	1767	1781	1707	1707	1781	1589
Adj Flow Rate, veh/h	224	134	0	300	123	0	90	1721	0	590	2053	176
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, %	16	10	6	1	9	10	9	8	13	13	8	21
Cap, veh/h	308	160		338	178		142	2335		729	3453	759
Arrive On Green	0.14	0.09	0.00	0.15	0.10	0.00	0.05	0.38	0.00	0.23	0.56	0.56
Sat Flow, veh/h	1584	1752	0	1795	1767	1485	1682	6378	0	3155	6128	1346
Grp Volume(v), veh/h	224	134	0	300	123	0	90	1721	0	590	2053	176
Grp Sat Flow(s),veh/h/ln	1584	1752	0	1795	1767	1485	1682	1532	0	1577	1532	1346
Q Serve(g_s), s	19.0	11.3	0.0	22.5	10.1	0.0	5.4	36.3	0.0	26.5	33.0	9.8
Cycle Q Clear(g_c), s	19.0	11.3	0.0	22.5	10.1	0.0	5.4	36.3	0.0	26.5	33.0	9.8
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	160		338	178		142	2335		729	3453	759
V/C Ratio(X)	0.73	0.84		0.89	0.69		0.63	0.74		0.81	0.59	0.23
Avail Cap(c_a), veh/h	323	286		338	289		167	2513		729	3453	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.69	0.69	0.69
Uniform Delay (d), s/veh	51.9	67.1	0.0	52.5	65.2	0.0	39.1	40.0	0.0	54.6	21.5	16.4
Incr Delay (d2), s/veh	7.6	11.0	0.0	23.8	4.7	0.0	5.9	2.1	0.0	4.8	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	5.5	0.0	12.3	4.7	0.0	2.4	13.6	0.0	10.8	11.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	78.0	0.0	76.4	69.9	0.0	44.9	42.1	0.0	59.4	22.0	16.9
LnGrp LOS	E	E		E	E		D	D		E	C	B
Approach Vol, veh/h		358			423			1811			2819	
Approach Delay, s/veh		66.4			74.5			42.2			29.5	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	90.0	28.0	19.2	40.2	62.7	26.6	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	71.5	22.5	24.5	19.5	61.5	22.5	24.5
Max Q Clear Time (g_c+I1), s	7.4	35.0	24.5	13.3	28.5	38.3	21.0	12.1
Green Ext Time (p_c), s	0.0	32.1	0.0	0.4	0.0	18.9	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

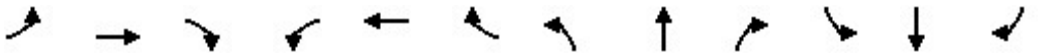
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	244	213	66	440	150	231	340	51	133	407	306
Future Volume (vph)	105	244	213	66	440	150	231	340	51	133	407	306
Lane Group Flow (vph)	117	271	237	73	489	167	257	378	57	148	452	340
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8	6		6	2		2
Detector Phase	4	4	4	8	8	8	1	6	6	5	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	5.0	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	15.0	28.5	28.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	16.0	36.0	36.0	15.0	35.0	35.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	17.8%	40.0%	40.0%	16.7%	38.9%	38.9%
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							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.04	0.50	0.37	0.24	0.83	0.28	0.62	0.51	0.09	0.33	0.65	0.48
Control Delay	131.3	27.0	4.5	22.9	40.9	5.6	19.5	25.1	1.7	13.6	30.3	12.1
Queue Delay	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 Delay	131.3	27.0	4.5	22.9	40.9	5.6	19.5	25.1	1.7	13.6	30.3	12.1
Queue Length 50th (ft)	65	119	0	29	246	6	76	168	0	41	225	57
Queue Length 95th (ft)	#171	183	46	61	353	45	#133	268	9	78	339	139
Internal Link Dist (ft)		378			487			2327			846	
Turn Bay Length (ft)	170		170	200		150	175		200	90		115
Base Capacity (vph)	128	625	700	343	673	667	421	746	641	466	696	703
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	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	0.91	0.43	0.34	0.21	0.73	0.25	0.61	0.51	0.09	0.32	0.65	0.48

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), 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: 4: SR 92 (Spence Rd) & Oakley Industrial Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	244	213	66	440	150	231	340	51	133	407	306
Future Volume (veh/h)	105	244	213	66	440	150	231	340	51	133	407	306
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	1752	1707	1767	1900	1826	1826	1856	1885	1752	1811	1885	1841
Adj Flow Rate, veh/h	117	271	0	73	489	0	257	378	0	148	452	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, %	10	13	9	0	5	5	3	1	10	6	1	4
Cap, veh/h	201	636		366	680		394	693		416	618	
Arrive On Green	0.37	0.37	0.00	0.37	0.37	0.00	0.12	0.37	0.00	0.08	0.33	0.00
Sat Flow, veh/h	850	1707	1497	1126	1826	1547	1767	1885	1485	1725	1885	1560
Grp Volume(v), veh/h	117	271	0	73	489	0	257	378	0	148	452	0
Grp Sat Flow(s),veh/h/ln	850	1707	1497	1126	1826	1547	1767	1885	1485	1725	1885	1560
Q Serve(g_s), s	12.3	10.7	0.0	4.7	20.7	0.0	8.5	14.3	0.0	5.0	19.1	0.0
Cycle Q Clear(g_c), s	33.0	10.7	0.0	15.3	20.7	0.0	8.5	14.3	0.0	5.0	19.1	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	201	636		366	680		394	693		416	618	
V/C Ratio(X)	0.58	0.43		0.20	0.72		0.65	0.55		0.36	0.73	
Avail Cap(c_a), veh/h	201	636		366	680		394	693		465	618	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	21.1	0.0	26.8	24.2	0.0	19.0	22.5	0.0	18.2	26.7	0.0
Incr Delay (d2), s/veh	4.2	0.5	0.0	0.3	3.7	0.0	3.8	3.1	0.0	0.5	7.5	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	2.7	4.0	0.0	1.2	8.8	0.0	3.5	6.4	0.0	1.9	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	21.5	0.0	27.1	27.9	0.0	22.8	25.6	0.0	18.7	34.2	0.0
LnGrp LOS	D	C		C	C		C	C		B	C	
Approach Vol, veh/h		388			562			635			600	
Approach Delay, s/veh		27.9			27.8			24.5			30.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	35.0		39.0	12.4	38.6		39.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	29.5		33.5	9.5	30.5		33.5				
Max Q Clear Time (g_c+I1), s	10.5	21.1		35.0	7.0	16.3		22.7				
Green Ext Time (p_c), s	0.0	2.8		0.0	0.1	3.2		2.3				

Intersection Summary			
HCM 6th Ctrl Delay		27.6	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	107	0	13	0	0	8	42	502	1	7	562	58
Future Vol, veh/h	107	0	13	0	0	8	42	502	1	7	562	58
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	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	165	-	0	235	-	175
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	0	2	71	2	4	100	83	4	2
Mvmt Flow	116	0	14	0	0	9	47	558	1	8	624	64

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1297	1293	624	1324	1356	558	688	0	0	559	0	0
Stage 1	640	640	-	652	652	-	-	-	-	-	-	-
Stage 2	657	653	-	672	704	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.91	4.12	-	-	4.93	-	-
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	3.939	2.218	-	-	2.947	-	-
Pot Cap-1 Maneuver	139	163	485	134	149	418	906	-	-	708	-	-
Stage 1	464	470	-	460	464	-	-	-	-	-	-	-
Stage 2	454	464	-	449	440	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	130	153	485	124	140	418	906	-	-	708	-	-
Mov Cap-2 Maneuver	130	153	-	243	252	-	-	-	-	-	-	-
Stage 1	440	465	-	436	440	-	-	-	-	-	-	-
Stage 2	421	440	-	431	435	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	105.9	13.8	0.7	0.1
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	906	-	-	130	485	418	708	-	-
HCM Lane V/C Ratio	0.052	-	-	0.895	0.029	0.021	0.011	-	-
HCM Control Delay (s)	9.2	-	-	117.2	12.6	13.8	10.1	-	-
HCM Lane LOS	A	-	-	F	B	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5.8	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	543	0	1	578
Future Vol, veh/h	0	1	543	0	1	578
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	-	-	160	165	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	0	0	4
Mvmt Flow	0	1	603	0	1	642

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1247	603	0	0	603	0
Stage 1	603	-	-	-	-	-
Stage 2	644	-	-	-	-	-
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	193	503	-	-	984	-
Stage 1	550	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	193	503	-	-	984	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	526	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	503	984	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	12.2	8.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	502	57	58	469	0	62	7	36	0	13	1
Future Vol, veh/h	6	502	57	58	469	0	62	7	36	0	13	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	4	2	0	4	0	4	4	0	0	4	0
Mvmt Flow	7	546	62	63	510	0	67	8	39	0	14	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	608	0	0	1235	1227	577	1251	1258	510
Stage 1	-	-	-	-	-	-	591	591	-	636	636	-
Stage 2	-	-	-	-	-	-	644	636	-	615	622	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.14	6.54	6.2	7.1	6.54	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.1	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.1	5.54	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.536	4.036	3.3	3.5	4.036	3.3
Pot Cap-1 Maneuver	1065	-	-	980	-	-	152	177	520	151	169	567
Stage 1	-	-	-	-	-	-	490	491	-	469	469	-
Stage 2	-	-	-	-	-	-	458	469	-	482	476	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1065	-	-	980	-	-	130	159	520	124	152	567
Mov Cap-2 Maneuver	-	-	-	-	-	-	130	159	-	124	152	-
Stage 1	-	-	-	-	-	-	485	486	-	464	427	-
Stage 2	-	-	-	-	-	-	402	427	-	434	471	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1	55.6	29.9
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	178	1065	-	-	980	-	-	160
HCM Lane V/C Ratio	0.641	0.006	-	-	0.064	-	-	0.095
HCM Control Delay (s)	55.6	8.4	0	-	8.9	0	-	29.9
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	3.7	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	13	0	617	614	108
Future Vol, veh/h	0	13	0	617	614	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	4	4	2
Mvmt Flow	0	14	0	671	667	117

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	667	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	459	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	459	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

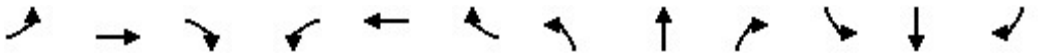
Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	459	-
HCM Lane V/C Ratio	-	0.031	-
HCM Control Delay (s)	-	13.1	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.1	-

Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	222	0	28	0	17	492	2	416	24
Future Volume (vph)	222	0	28	0	17	492	2	416	24
Lane Group Flow (vph)	0	252	32	3	19	559	2	473	27
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		4		8		6		2	
Permitted Phases	4		4		6		2		2
Detector Phase	4	4	4	8	6	6	2	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	31.5	30.5	28.5	28.5	28.5	28.5	28.5
Total Split (s)	36.0	36.0	36.0	36.0	54.0	54.0	54.0	54.0	54.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	60.0%	60.0%	60.0%	60.0%	60.0%
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
Total Lost Time (s)		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		0.75	0.08	0.01	0.04	0.48	0.01	0.41	0.03
Control Delay		45.1	8.5	0.0	8.4	11.4	15.5	13.3	8.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		45.1	8.5	0.0	8.4	11.4	15.5	13.3	8.1
Queue Length 50th (ft)		133	0	0	4	149	0	78	0
Queue Length 95th (ft)		187	19	0	15	280	m2	278	m14
Internal Link Dist (ft)		232		479		356		286	
Turn Bay Length (ft)					165		235		175
Base Capacity (vph)		477	557	465	523	1167	231	1167	1022
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		0.53	0.06	0.01	0.04	0.48	0.01	0.41	0.03

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: SR 92 (Spence Rd) & Site Drwy 1 (S)/SiteOne Drwy (N)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	0	28	0	0	3	17	492	0	2	416	24
Future Volume (veh/h)	222	0	28	0	0	3	17	492	0	2	416	24
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	1870	1870	1870	1900	1870	418	1870	1841	1900	418	1841	1870
Adj Flow Rate, veh/h	252	0	0	0	0	3	19	559	0	2	473	27
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	0	2	100	2	4	0	100	4	2
Cap, veh/h	373	0		0	0	330	681	1232	1078	180	1232	1061
Arrive On Green	0.21	0.00	0.00	0.00	0.00	0.21	0.67	0.67	0.00	1.00	1.00	1.00
Sat Flow, veh/h	1404	0	1585	0	0	1585	898	1841	1610	190	1841	1585
Grp Volume(v), veh/h	252	0	0	0	0	3	19	559	0	2	473	27
Grp Sat Flow(s),veh/h/ln	1404	0	1585	0	0	1585	898	1841	1610	190	1841	1585
Q Serve(g_s), s	15.5	0.0	0.0	0.0	0.0	0.1	0.6	13.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	15.6	0.0	0.0	0.0	0.0	0.1	0.6	13.0	0.0	13.2	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	0		0	0	330	681	1232	1078	180	1232	1061
V/C Ratio(X)	0.68	0.00		0.00	0.00	0.01	0.03	0.45	0.00	0.01	0.38	0.03
Avail Cap(c_a), veh/h	557	0		0	0	537	681	1232	1078	180	1232	1061
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	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	0.0	0.0	0.0	28.3	5.0	7.1	0.0	1.4	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.0	0.0	0.0	0.1	1.2	0.0	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	0.0	0.0	0.1	0.1	4.2	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	0.0	0.0	0.0	28.3	5.1	8.3	0.0	1.5	0.9	0.0
LnGrp LOS	D	A		A	A	C	A	A	A	A	A	A
Approach Vol, veh/h		252			3			578			502	
Approach Delay, s/veh		36.6			28.3			8.2			0.9	
Approach LOS		D			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.7		24.3		65.7		24.3				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		48.5		30.5		48.5		30.5				
Max Q Clear Time (g_c+I1), s		15.2		17.6		15.0		2.1				
Green Ext Time (p_c), s		6.3		1.2		7.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

Notes

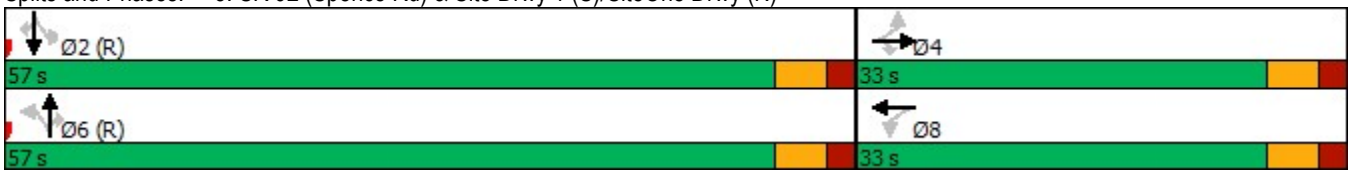
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

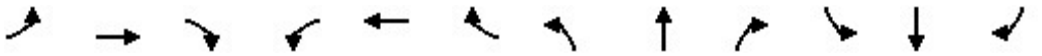
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	107	0	13	0	42	502	1	7	562	58
Future Volume (vph)	107	0	13	0	42	502	1	7	562	58
Lane Group Flow (vph)	0	119	14	9	47	558	1	8	624	64
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4		8		6			2	
Permitted Phases	4		4		6		6	2		2
Detector Phase	4	4	4	8	6	6	6	2	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	15.0
Minimum Split (s)	31.5	31.5	31.5	30.5	28.5	28.5	28.5	28.5	28.5	28.5
Total Split (s)	33.0	33.0	33.0	33.0	57.0	57.0	57.0	57.0	57.0	57.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	63.3%	63.3%	63.3%	63.3%	63.3%	63.3%
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
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	C-Min
v/c Ratio		0.59	0.06	0.02	0.09	0.42	0.00	0.03	0.47	0.05
Control Delay		47.0	5.1	0.1	4.9	6.4	0.0	9.1	11.4	4.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		47.0	5.1	0.1	4.9	6.4	0.0	9.1	11.4	4.9
Queue Length 50th (ft)		64	0	0	6	101	0	2	199	3
Queue Length 95th (ft)		112	8	0	20	197	0	m5	346	m17
Internal Link Dist (ft)		232		479		356			286	
Turn Bay Length (ft)					165			235		175
Base Capacity (vph)		428	504	506	520	1339	600	319	1339	1177
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		0.28	0.03	0.02	0.09	0.42	0.00	0.03	0.47	0.05

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: SR 92 (Spence Rd) & Site Drwy 1 (S)/SiteOne Drwy (N)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	0	13	0	0	8	42	502	1	7	562	58
Future Volume (veh/h)	107	0	13	0	0	8	42	502	1	7	562	58
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	1870	1870	1870	1900	1870	848	1870	1841	418	670	1841	1870
Adj Flow Rate, veh/h	119	0	0	0	0	9	47	558	1	8	624	64
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, %	2	2	2	0	2	71	2	4	100	83	4	2
Cap, veh/h	229	0		0	0	176	658	1411	272	283	1411	1215
Arrive On Green	0.11	0.00	0.00	0.00	0.00	0.11	0.77	0.77	0.77	1.00	1.00	1.00
Sat Flow, veh/h	1342	0	1585	0	0	1585	755	1841	354	305	1841	1585
Grp Volume(v), veh/h	119	0	0	0	0	9	47	558	1	8	624	64
Grp Sat Flow(s),veh/h/ln	1342	0	1585	0	0	1585	755	1841	354	305	1841	1585
Q Serve(g_s), s	7.4	0.0	0.0	0.0	0.0	0.5	1.4	9.1	0.1	0.3	0.0	0.0
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	0.0	0.5	1.4	9.1	0.1	9.5	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	0		0	0	176	658	1411	272	283	1411	1215
V/C Ratio(X)	0.52	0.00		0.00	0.00	0.05	0.07	0.40	0.00	0.03	0.44	0.05
Avail Cap(c_a), veh/h	502	0		0	0	484	658	1411	272	283	1411	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	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	0.0	0.0	0.0	35.8	2.6	3.5	2.5	0.6	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.0	0.0	0.1	0.2	0.8	0.0	0.2	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.0	0.0	0.2	0.2	2.2	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	0.0	0.0	0.0	35.9	2.8	4.3	2.5	0.8	1.0	0.1
LnGrp LOS	D	A		A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		119			9			606			696	
Approach Delay, s/veh		41.1			35.9			4.2			0.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		74.5		15.5		74.5		15.5				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		51.5		27.5		51.5		27.5				
Max Q Clear Time (g_c+I1), s		11.5		9.9		11.1		2.5				
Green Ext Time (p_c), s		10.1		0.5		8.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			5.9									
HCM 6th LOS			A									

Notes

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

Signal Warrant Analysis/
Left Turn Phase Analysis

A&R ENGINEERING, INC.

SIGNAL WARRANT ANALYSIS SUMMARY REPORT - SR 92 (Spence Rd) @ Site Drwy 1 (S) / SiteOne N. Drwy

Project Number :	24-144	Report Date :	September 20, 2024
		Counts Date :	August 28, 2024
Major Street :	SR 92 (Spence Rd)		
Minor Street :	Site Drwy 1 (S) / SiteOne N. Drwy		
Speed on Major Street :	45		
Lanes @ Intersection :	Major Street - 1		
	Minor Street - 2		
Analyst :	SDP		

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

WARRANT 1 **NOT SATISFIED**

STANDARD 1	**NOT SATISFIED**	CONDITION A	1	HOURS
		CONDITION B	2	HOURS
STANDARD 2	**NOT SATISFIED**	CONDITION A	2	HOURS
		CONDITION B	4	HOURS

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

WARRANT 2 **NOT SATISFIED** 2 HOURS

WARRANT 3, PEAK HOUR

WARRANT 3 **SATISFIED**

STANDARD A	**SATISFIED**	12	VEHICLE HOURS
STANDARD B	**NOT SATISFIED**	0	HOURS

WARRANT 4, PEDESTRIAN VOLUME

WARRANT 4 **NOT EVALUATED**

STANDARD A	**NOT SATISFIED**	0	HOURS
STANDARD B	**NOT SATISFIED**	0	HOURS

WARRANT 5, SCHOOL CROSSING

WARRANT 5 **NOT EVALUATED**

WARRANT 6, COORDINATED SIGNAL SYSTEM

WARRANT 6 **NOT EVALUATED**

WARRANT 7, CRASH EXPERIENCE

WARRANT 7 **NOT EVALUATED**

WARRANT 8, ROADWAY NETWORK

WARRANT 8 **NOT EVALUATED**

WARRANT 9, INTERSECTION NEAR A GRADE CROSSING

WARRANT 9 **NOT EVALUATED**

A&R ENGINEERING, INC.

SIGNAL WARRANT ANALYSIS SUMMARY REPORT - SR 92 (Spence Rd) @ Site Drwy 1 (S) / SiteOne N. Drwy

Project Number : 24-144
Report Date : September 20, 2024
Counts Date : August 28, 2024
Major Street : SR 92 (Spence Rd)
Lanes @ Intersection : Major Street - 1
Minor Street : Site Drwy 1 (S) / SiteOne N. Drw
Minor Street - 2
Speed on Major Street : 45
Analyst : SDP

24-HOUR TRAFFIC VOLUME

TABLE 1

Time	Major Street Northbound				Major Street Southbound			
24 Hours	Total Approach Volume	Right Turn	% Right Turn	With 0 % RT Turn Reduction	Total Approach Volume	Right Turn	% Right Turn	With 0% RT Turn Reduction
12:00 AM	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0
7:00 AM	509	0	0	509	442	24	5	442
8:00 AM	332	0	0	332	406	20	5	406
9:00 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
4:00 PM	519	1	0	519	574	53	9	574
5:00 PM	545	1	0	545	627	58	9	627
6:00 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0

Total		1905		2049

A&R ENGINEERING, INC.

24-HOUR TRAFFIC VOLUME

TABLE 2

Time	Minor Street				Minor Street			
	Eastbound				Westbound			
24 Hours	Total Approach Volume	Right Turn	% Right Turn	With 100% RT Turn Reduction	Total Approach Volume	Right Turn	% Right Turn	With 100% RT Turn Reduction
12:00 AM	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0
7:00 AM	250	28	11	222	3	3	100	0
8:00 AM	224	25	11	199	4	4	100	0
9:00 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
4:00 PM	96	11	11	85	6	6	100	0
5:00 PM	120	13	11	107	8	8	100	0
6:00 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0

Total		613		0

A&R ENGINEERING, INC.

WARRANT ANALYSIS RESULTS - SR 92 (Spence Rd) @ Site Drwy 1 (S) / SiteOne N. Drwy

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

WARRANT 1 NOT SATISFIED

STANDARD 1	NOT SATISFIED	CONDITION A	1	HOURS
		CONDITION B	2	HOURS
STANDARD 2	NOT SATISFIED	CONDITION A	2	HOURS
		CONDITION B	4	HOURS

24-HOUR TRAFFIC VOLUME EVALUATION

TABLE 3

HOUR OF DAY	MAJOR ST TOTAL OF BOTH APPROACHES	MINOR ST HIGH VOLUME APPROACH	WARRANT 1			
			STANDARD 1		STANDARD 2	
			CONDITION A	CONDITION B	CONDITION A	CONDITION B
12:00 AM	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0
7:00 AM	951	222	BOTH	BOTH	BOTH	BOTH
8:00 AM	738	199	MAJOR	MINOR	BOTH	BOTH
9:00 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
4:00 PM	1093	85	MAJOR	MAJOR	MAJOR	BOTH
5:00 PM	1172	107	MAJOR	BOTH	MAJOR	BOTH
6:00 PM	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0
TOTAL	3954	613				

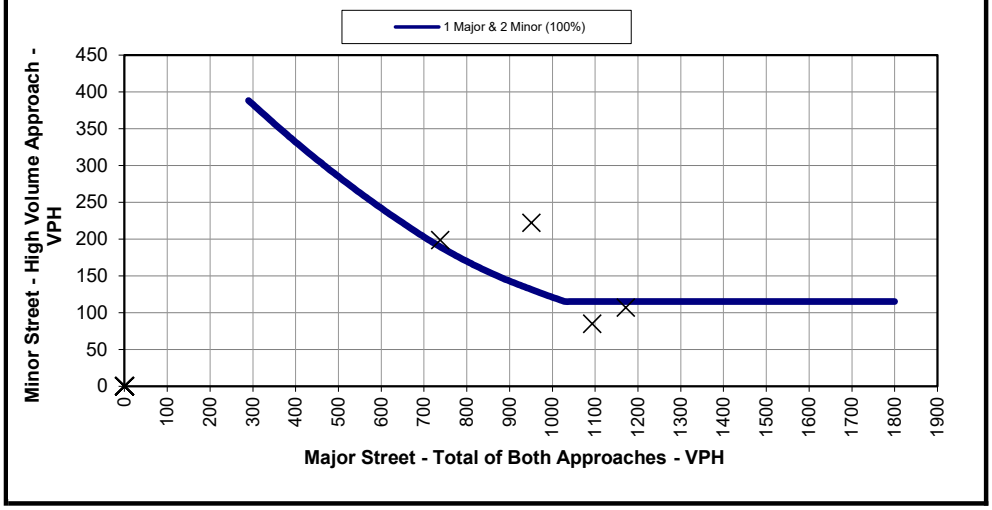
CRITERIA**		STANDARD 1 - 100%		STANDARD 2 - 80%	
		CONDITION A	CONDITION B	CONDITION A	CONDITION B
	MAJOR ST	500	750	400	600
	MINOR ST	200	100	160	80
NO. OF HOURS MET		1	2	2	4

A&R ENGINEERING, INC.

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

WARRANT 2* NOT SATISFIED 2 HOURS

Figure 4C-1: Warrant 2, Four-Hour Vehicle Volume



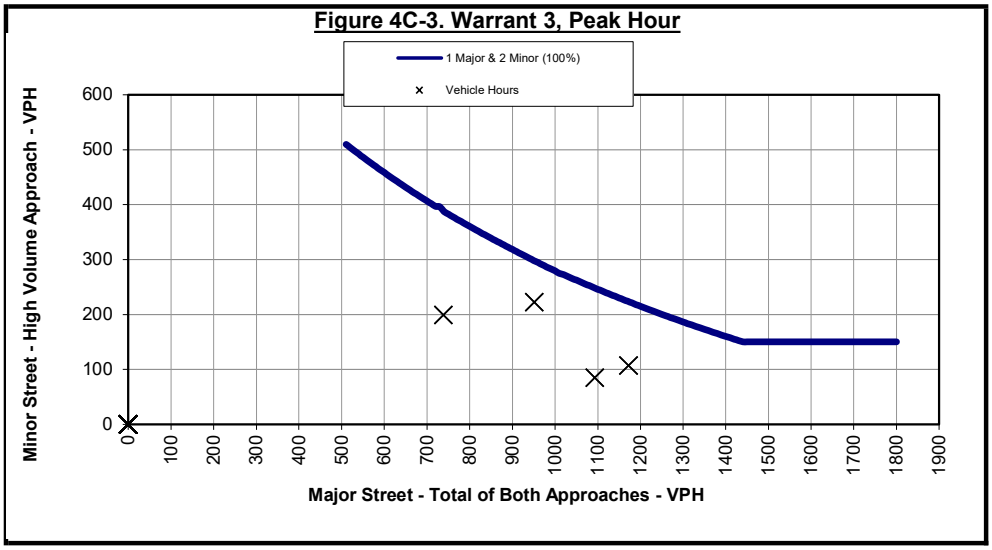
WARRANT 3, PEAK HOUR

STANDARD A SATISFIED 12 VEHICLE HOURS

250	Peak Hour Minor-Street Volume
179	Average Minor-Street Delay (seconds)
2	Number of Approach Lanes (Minor Street)

STANDARD B* SATISFIED 0 HOURS

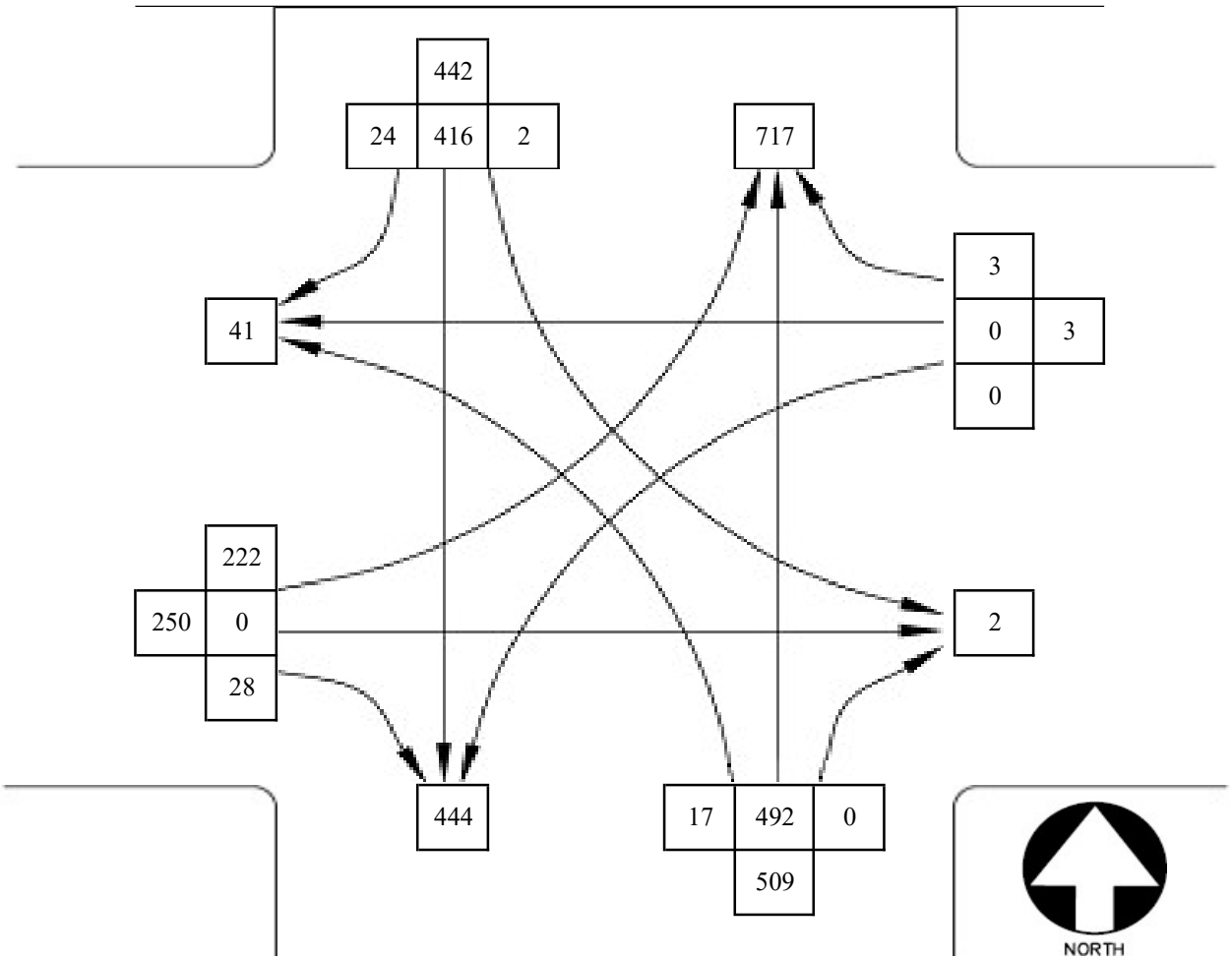
Figure 4C-3. Warrant 3, Peak Hour



*Note: Curves for minimum volumes are based on the curves from FIGURES 4C-1 & 4C-2, Page 4C-7 for WARRANT 2, and FIGURES 4C-3 & 4C-4, Page 4C-9 in section C of the MUTCD 2009 edition for WARRANT 3.

Future 2030 Traffic Count Summary Sheet

Peak Hour Count (AM)



SR 92 (Spence Road) @ Site Driveway 1 (South) / SiteOne North Driveway

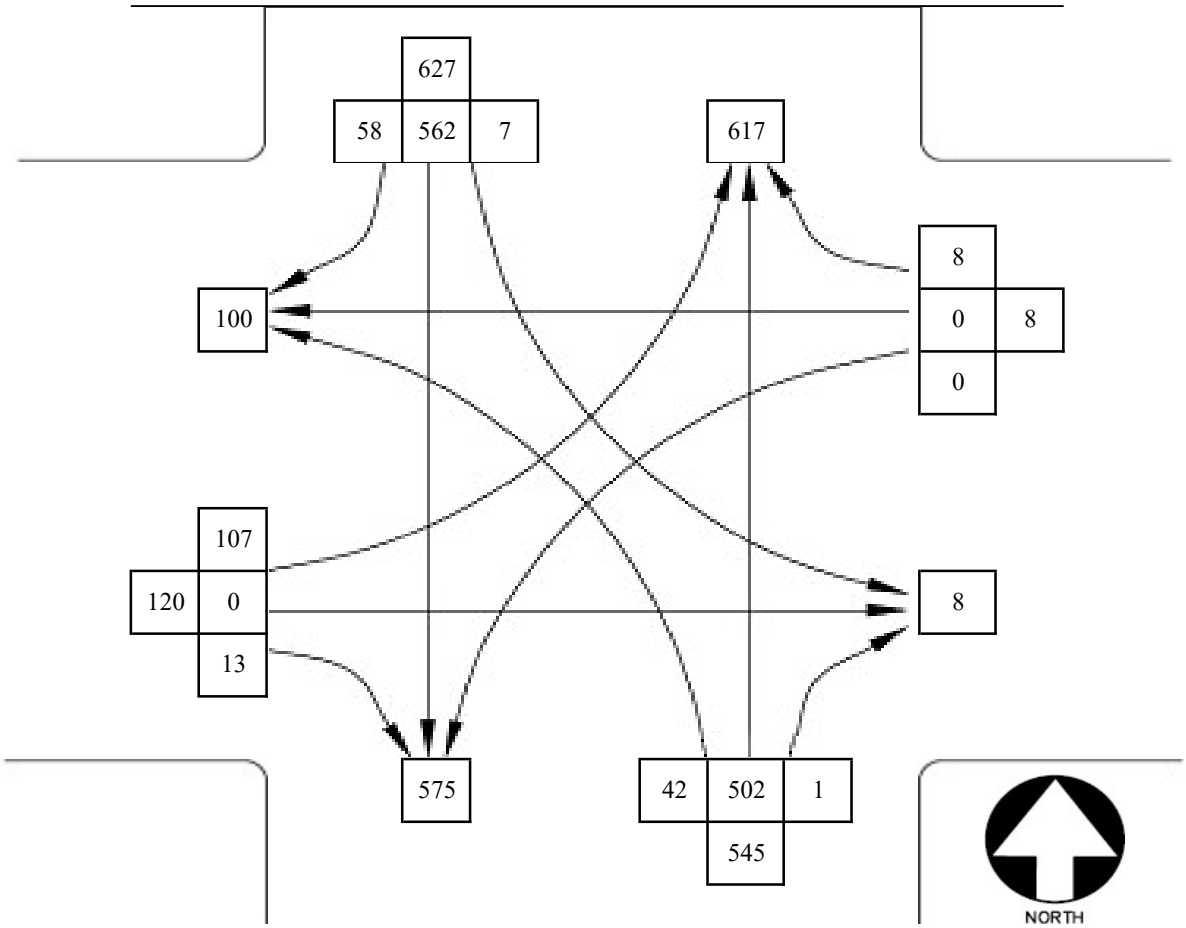
Conflicting Movements	Through Volume (V_o)	Left Turn Volume (V_{lt})	Opposing Lanes (N_o)	Cross-Product ($V_o \times V_{lt} \div N_o$)	Cross-Product Warrant?	Peak Volume Warrant?	Turn Phase Recommended?
NBL & SBT	416	17	1	7,072	NO	NO	NO
SBL & NBT	492	2	1	984	NO	NO	NO
EBL & WBT	0	222	1	0	NO	YES	YES, Leading
WBL & EBT	0	0	1	0	NO	NO	NO

LEFT TURN CRITERIA - AM PEAK HOUR

A&R Engineering Inc.

Future 2030 Traffic Count Summary Sheet

Peak Hour Count (PM)



SR 92 (Spence Road) @ Site Driveway 1 (South) / SiteOne North Driveway

Conflicting Movements	Through Volume (V_o)	Left Turn Volume (V_{lt})	Opposing Lanes (N_o)	Cross-Product ($V_o \times V_{lt} \div N_o$)	Cross-Product Warrant?	Peak Volume Warrant?	Turn Phase Recommended?
NBL & SBT	562	42	1	23,604	NO	NO	NO
SBL & NBT	502	7	1	3,514	NO	NO	NO
EBL & WBT	0	107	1	0	NO	Lagging Phase	YES, Lagging
WBL & EBT	0	0	1	0	NO	NO	NO

LEFT TURN CRITERIA - PM PEAK HOUR

A&R Engineering Inc.

Traffic Volume Worksheets

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

1. SR 74 @ I-85 SB Ramps

A.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					I-85 Southbound On-Ramp Eastbound					I-85 Southbound Off-Ramp Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	187	594	0	781	0	0	544	149	693	0	0	0	0	0	0	1499	0	656	2155
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1679	0	0	-1679
No-Build 2030 Volumes:	0	209	665	0	874	0	0	609	167	776	0	0	0	0	0	0	0	0	735	735
Total New Trips:	0	14	14	0	28	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0
Future 2030 Traffic Volumes:	0	223	679	0	902	0	0	613	167	780	0	0	0	0	0	0	0	0	735	735

P.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					I-85 Southbound On-Ramp Eastbound					I-85 Southbound Off-Ramp Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	397	708	0	1105	0	0	655	171	826	0	0	0	0	0	0	1904	0	560	2464
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2132	0	0	-2132
No-Build 2030 Volumes:	0	445	793	0	1238	0	0	734	192	926	0	0	0	0	0	0	0	0	627	627
Total New Trips:	0	7	7	0	14	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0
Future 2030 Traffic Volumes:	0	452	800	0	1252	0	0	744	192	936	0	0	0	0	0	0	0	0	627	627

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

2. SR 74 @ I-85 NB Ramps

A.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					I-85 Northbound Off-Ramp Eastbound					I-85 Northbound On-Ramp Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	504	1739	2243	0	334	1769	0	2103	0	193	0	358	551	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	-216	0	0	-216	0	0	0	216	216
No-Build 2030 Volumes:	0	0	564	1948	2512	0	374	1981	0	2355	0	0	0	401	401	0	0	0	216	216
Total New Trips:	0	0	28	56	84	0	0	22	0	22	0	0	0	4	4	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	592	2004	2596	0	374	2003	0	2377	0	0	0	405	405	0	0	0	216	216

P.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					I-85 Northbound Off-Ramp Eastbound					I-85 Northbound On-Ramp Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	810	1629	2439	0	426	2146	0	2572	0	189	0	280	469	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	-212	0	0	-212	0	0	0	212	212
No-Build 2030 Volumes:	0	0	907	1824	2731	0	477	2404	0	2881	0	0	0	314	314	0	0	0	212	212
Total New Trips:	0	0	13	27	40	0	0	52	0	52	0	0	0	10	10	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	920	1851	2771	0	477	2456	0	2933	0	0	0	324	324	0	0	0	212	212

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

3. SR 74 @ Oakley Ind. Blvd

A.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					Oakley Industrial Boulevard Eastbound					Oakley Industrial Boulevard Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	9	33	1446	97	1585	34	401	1586	193	2214	0	154	68	19	241	0	193	77	342	612
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	10	37	1620	109	1776	38	449	1776	216	2479	0	172	76	21	269	0	216	86	383	685
Total New Trips:	0	0	0	9	9	0	26	0	0	26	0	0	4	0	4	0	28	14	83	125
Future 2030 Traffic Volumes:	10	37	1620	118	1785	38	475	1776	216	2505	0	172	80	21	273	0	244	100	466	810

P.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					Oakley Industrial Boulevard Eastbound					Oakley Industrial Boulevard Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	18	60	1490	109	1677	23	432	1778	153	2386	0	194	107	32	333	0	248	100	337	685
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	20	67	1669	122	1878	26	484	1991	171	2672	0	217	120	36	373	0	278	112	377	767
Total New Trips:	0	0	0	21	21	0	62	0	0	62	0	0	10	0	10	0	13	7	40	60
Future 2030 Traffic Volumes:	20	67	1669	143	1899	26	546	1991	171	2734	0	217	130	36	383	0	291	119	417	827

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

4. SR 92 @ Oakley Ind. Blvd

A.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					Oakley Industrial Boulevard Eastbound					Oakley Industrial Boulevard Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	108	316	19	443	0	154	329	259	742	0	115	265	95	475	0	17	203	80	300
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	121	354	21	496	0	172	368	290	830	0	129	297	106	532	0	19	227	90	336
Total New Trips:	0	125	42	56	223	0	0	13	0	13	0	0	0	39	39	0	17	0	0	17
Future 2030 Traffic Volumes:	0	246	396	77	719	0	172	381	290	843	0	129	297	145	571	0	36	227	90	353

P.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					Oakley Industrial Boulevard Eastbound					Oakley Industrial Boulevard Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	153	286	21	460	0	119	336	273	728	0	94	218	106	418	0	21	393	134	548
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	171	320	24	515	0	133	376	306	815	0	105	244	119	468	0	24	440	150	614
Total New Trips:	0	60	20	27	107	0	0	31	0	31	0	0	0	94	94	0	42	0	0	42
Future 2030 Traffic Volumes:	0	231	340	51	622	0	133	407	306	846	0	105	244	213	562	0	66	440	150	656

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

5. SR 92 @ SiteOne N-Drwy1 (S)

A.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					Site Driveway 1 (South) Eastbound					SiteOne North Driveway Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	439	0	439	0	2	346	0	348	0	0	0	0	0	0	0	0	3	3
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	0	492	0	492	0	2	388	0	390	0	0	0	0	0	0	0	0	3	3
Total New Trips:	0	17	0	0	17	0	0	28	24	52	0	222	0	28	250	0	0	0	0	0
Future 2030 Traffic Volumes:	0	17	492	0	509	0	2	416	24	442	0	222	0	28	250	0	0	0	3	3

P.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					Site Driveway 1 (South) Eastbound					SiteOne North Driveway Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	448	1	449	0	6	490	0	496	0	0	0	0	0	0	0	0	7	7
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	0	502	1	503	0	7	549	0	556	0	0	0	0	0	0	0	0	8	8
Total New Trips:	0	42	0	0	42	0	0	13	58	71	0	107	0	13	120	0	0	0	0	0
Future 2030 Traffic Volumes:	0	42	502	1	545	0	7	562	58	627	0	107	0	13	120	0	0	0	8	8

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

6. SR 92 @ SiteOne South Drwy

A.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					- Eastbound					SiteOne South Driveway Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	438	0	438	0	2	342	0	344	0	0	0	0	0	0	0	0	1	1
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	0	491	0	491	0	2	383	0	385	0	0	0	0	0	0	0	0	1	1
Total New Trips:	0	0	17	0	17	0	0	56	0	56	0	0	0	0	0	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	508	0	508	0	2	439	0	441	0	0	0	0	0	0	0	0	1	1

P.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					- Eastbound					SiteOne South Driveway Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	447	0	447	0	0	492	0	492	0	0	0	0	0	0	0	0	1	1
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	0	501	0	501	0	0	551	0	551	0	0	0	0	0	0	0	0	1	1
Total New Trips:	0	0	42	0	42	0	0	27	0	27	0	0	0	0	0	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	543	0	543	0	0	578	0	578	0	0	0	0	0	0	0	0	1	1

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

7. SR 92 @ Lees Lake Rd

A.M. Peak Hour

	Lees Lake Road Northbound					Lees Mill Road Southbound					SR 92 (Spence Road) Eastbound					SR 92 (Spence Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	75	16	20	111	0	0	5	4	9	0	3	307	29	339	0	22	342	1	365
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	84	18	22	124	0	0	6	4	10	0	3	344	32	379	0	25	383	1	409
Total New Trips:	0	4	0	0	4	0	0	0	0	0	0	0	42	14	56	0	0	13	0	13
Future 2030 Traffic Volumes:	0	88	18	22	128	0	0	6	4	10	0	3	386	46	435	0	25	396	1	422

P.M. Peak Hour

	Lees Lake Road Northbound					Lees Mill Road Southbound					SR 92 (Spence Road) Eastbound					SR 92 (Spence Road) Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	46	6	32	84	0	0	12	1	13	0	5	430	45	480	0	52	391	0	443
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	52	7	36	95	0	0	13	1	14	0	6	482	50	538	0	58	438	0	496
Total New Trips:	0	10	0	0	10	0	0	0	0	0	0	0	20	7	27	0	0	31	0	31
Future 2030 Traffic Volumes:	0	62	7	36	105	0	0	13	1	14	0	6	502	57	565	0	58	469	0	527

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

8. SR 92 @ Drwy 2 (N.RIRO)

A.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					Site Driveway 2 (North, RIRO) Eastbound					- Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	442	0	442	0	0	348	0	348	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	0	495	0	495	0	0	390	0	390	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	222	0	222	0	0	24	45	69	0	0	0	28	28	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	717	0	717	0	0	414	45	459	0	0	0	28	28	0	0	0	0	0

P.M. Peak Hour

	SR 92 (Spence Road) Northbound					SR 92 (Spence Road) Southbound					Site Driveway 2 (North, RIRO) Eastbound					- Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	455	0	455	0	0	496	0	496	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2030 Volumes:	0	0	510	0	510	0	0	556	0	556	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	107	0	107	0	0	58	108	166	0	0	0	13	13	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	617	0	617	0	0	614	108	722	0	0	0	13	13	0	0	0	0	0

24-144 Lofts at South Fulton (DRI #4237) - South Fulton, GA

Traffic Volumes

A&R Engineering
September 2024

9. SR 74 @ I-85 SB Ramps EBR

A.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					I-85 Southbound EBR Loop Ramp Eastbound					- Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	781	0	781	0	0	2103	0	2103	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	-1679	0	-1679	0	0	0	1679	1679	0	0	0	0	0
No-Build 2030 Volumes:	0	0	875	0	875	0	0	676	0	676	0	0	0	1679	1679	0	0	0	0	0
Total New Trips:	0	0	28	0	28	0	0	4	0	4	0	0	0	17	17	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	903	0	903	0	0	680	0	680	0	0	0	1696	1696	0	0	0	0	0

P.M. Peak Hour

	SR 74 (Senoia Road) Northbound					SR 74 (Senoia Road) Southbound					I-85 Southbound EBR Loop Ramp Eastbound					- Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	1105	0	1105	0	0	2572	0	2572	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
Shifted Lefts due to Interchange Project:	0	0	0	0	0	0	0	-2132	0	-2132	0	0	0	2132	2132	0	0	0	0	0
No-Build 2030 Volumes:	0	0	1238	0	1238	0	0	749	0	749	0	0	0	2132	2132	0	0	0	0	0
Total New Trips:	0	0	13	0	13	0	0	10	0	10	0	0	0	42	42	0	0	0	0	0
Future 2030 Traffic Volumes:	0	0	1251	0	1251	0	0	759	0	759	0	0	0	2174	2174	0	0	0	0	0