

Traffic Impact Study

Proposed Forza Manufacturing Development
City of Senoia, Georgia

March 1, 2023

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING



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City of Senoia, Georgia

study prepared for:

Forza Group

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Introduction

This study assesses the traffic impact of a proposed manufacturing development in the City of Senoia, Georgia. The site is located along the east side of GA 74/85 at its intersection with Seavy Street, as shown in Figure 1. The site will be developed with a mix of manufacturing, office, and shop facilities. Vehicular access will be provided at one location on GA 74/85 which will align with realigned Seavy Street.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.

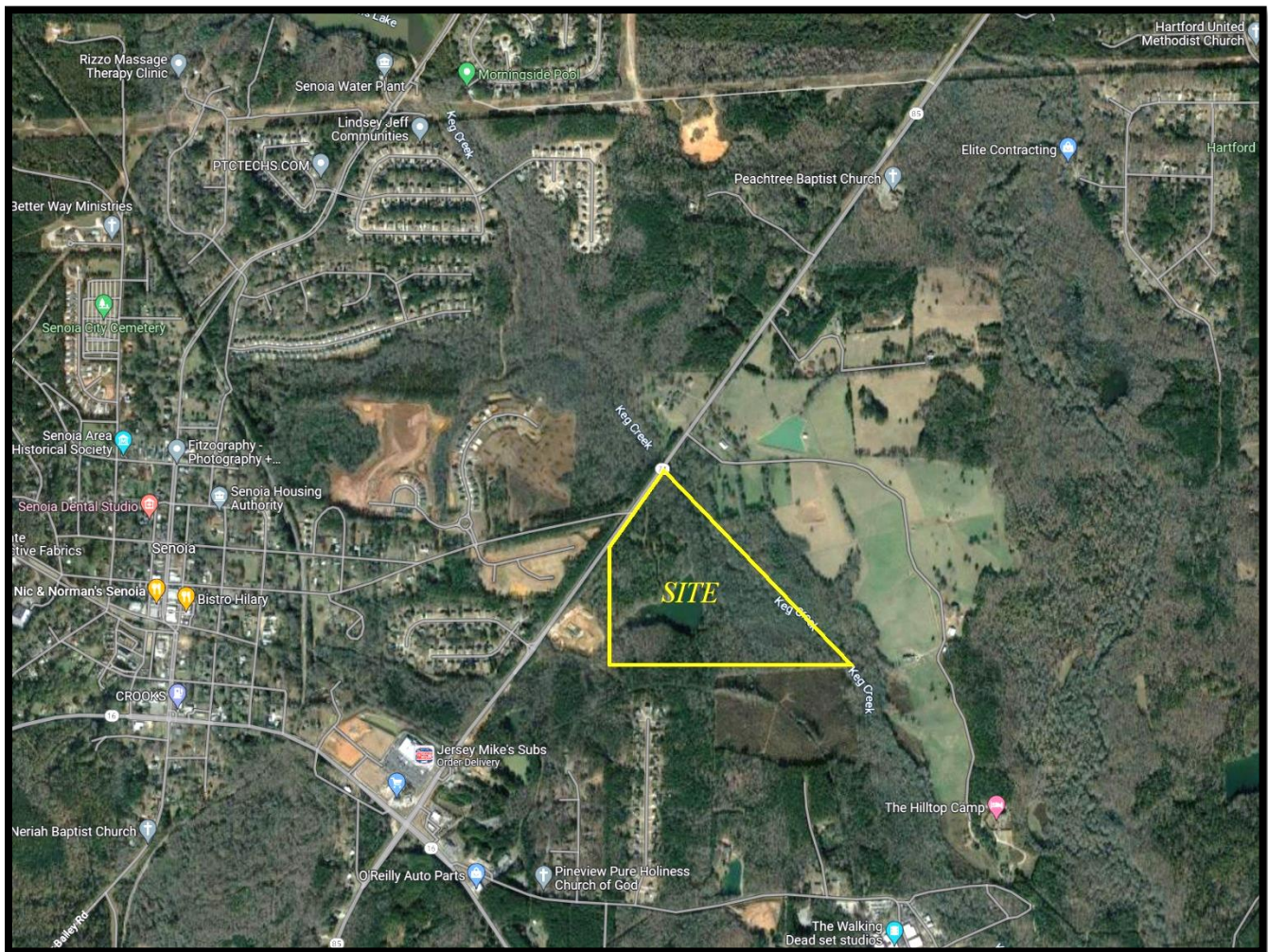


Figure 1 – Site Location Map

Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed manufacturing development were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

Description of Existing Roadways

Georgia State Route 74/85 is a two lane urban minor arterial (Georgia DOT designation) that provides north/south mobility through this part of central Georgia. The terrain is gently rolling and the posted speed limit is 55 mph at Seavy Street, dropping to 45 mph to the south, then to 35 mph closer to its intersection with GA 16. In 2021 the Georgia DOT recorded an Annual Average Daily Traffic (AADT) volume of 13,700 vehicles per day (vpd) on GA 74/85 just north of Seavy Street.

Seavy Street is a two lane collector that begins in downtown Senoia and terminates at GA 74/85. The terrain is very gently rolling and the posted speed limit is 35 mph.

Pedestrian, Bicycle, and Transit Accessibility

There is no sidewalk along GA 74/85 or Seavy Street in the vicinity of the project. There are no dedicated bicycle lanes in the vicinity of the site. There is no regularly scheduled mass transit service in the vicinity of the site.

Existing Traffic Volumes

Existing full turning movement a.m. and p.m. peak hour traffic volume counts were collected at the following intersections in the vicinity of the site:

1. GA 74/85 at GA 16
2. GA 74/85 at Seavy Street
3. GA 74/85 at Joel Cowan Parkway / Padgett Road

The counts at intersection 1 were collected on Thursday, October 27, 2022, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. The counts at intersections 2 and 3 were collected on Thursday, February 23, 2023, with the counts at Seavy Street counted for 12 hours from 7:00 a.m. to 6:00 p.m. and the counts at Joel Cowan Parkway counted for the same hours as the counts at intersection 1. Area schools were in session on all days on which the counts were recorded. The locations of the traffic counts are presented in Figure 2.

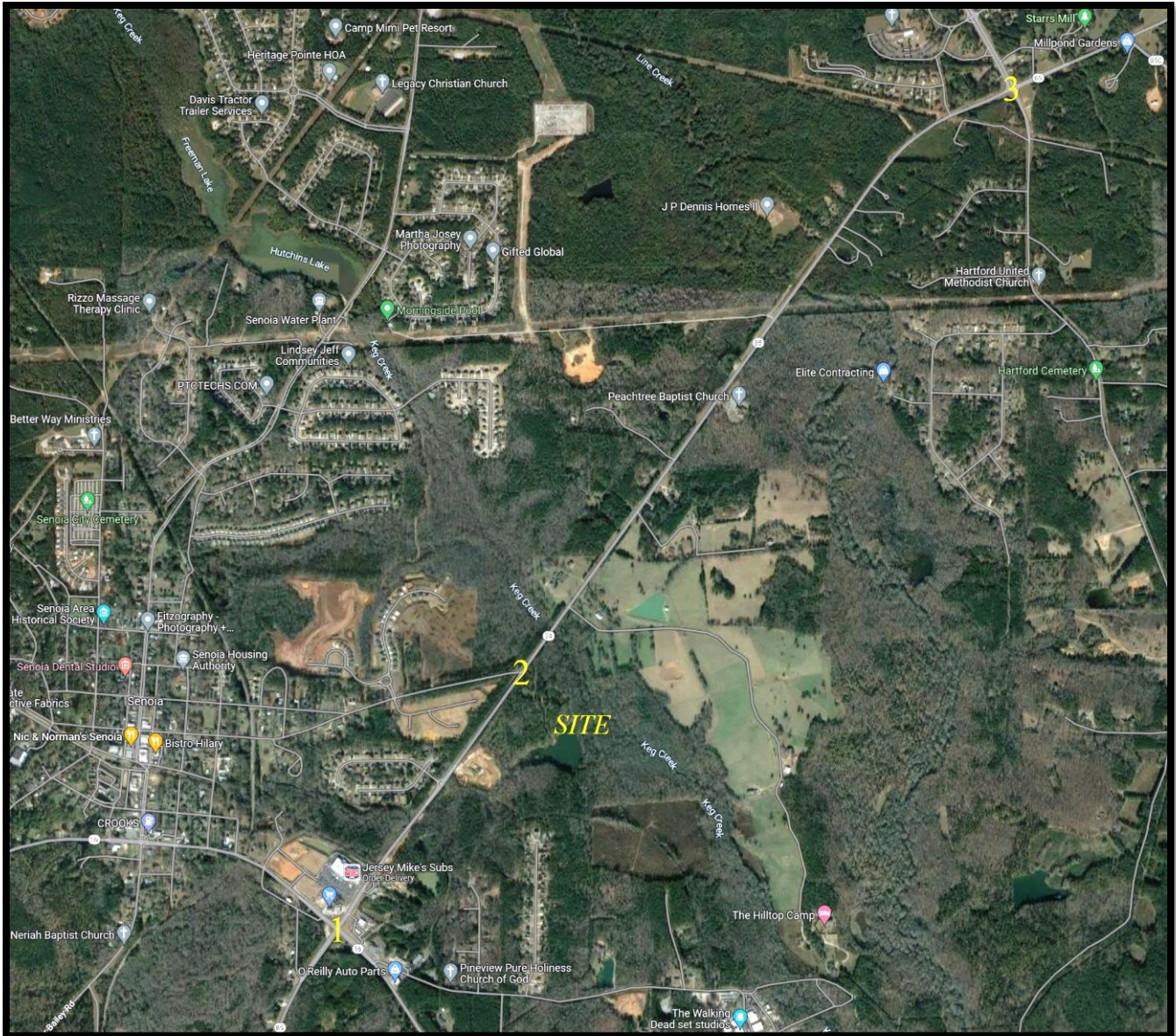


Figure 2 – Traffic Volume Count Locations

From the intersection turning movement count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the existing weekday a.m. and p.m. peak hour traffic volumes at each intersection and are shown in Figure 3. The raw count data is found in Appendix A.

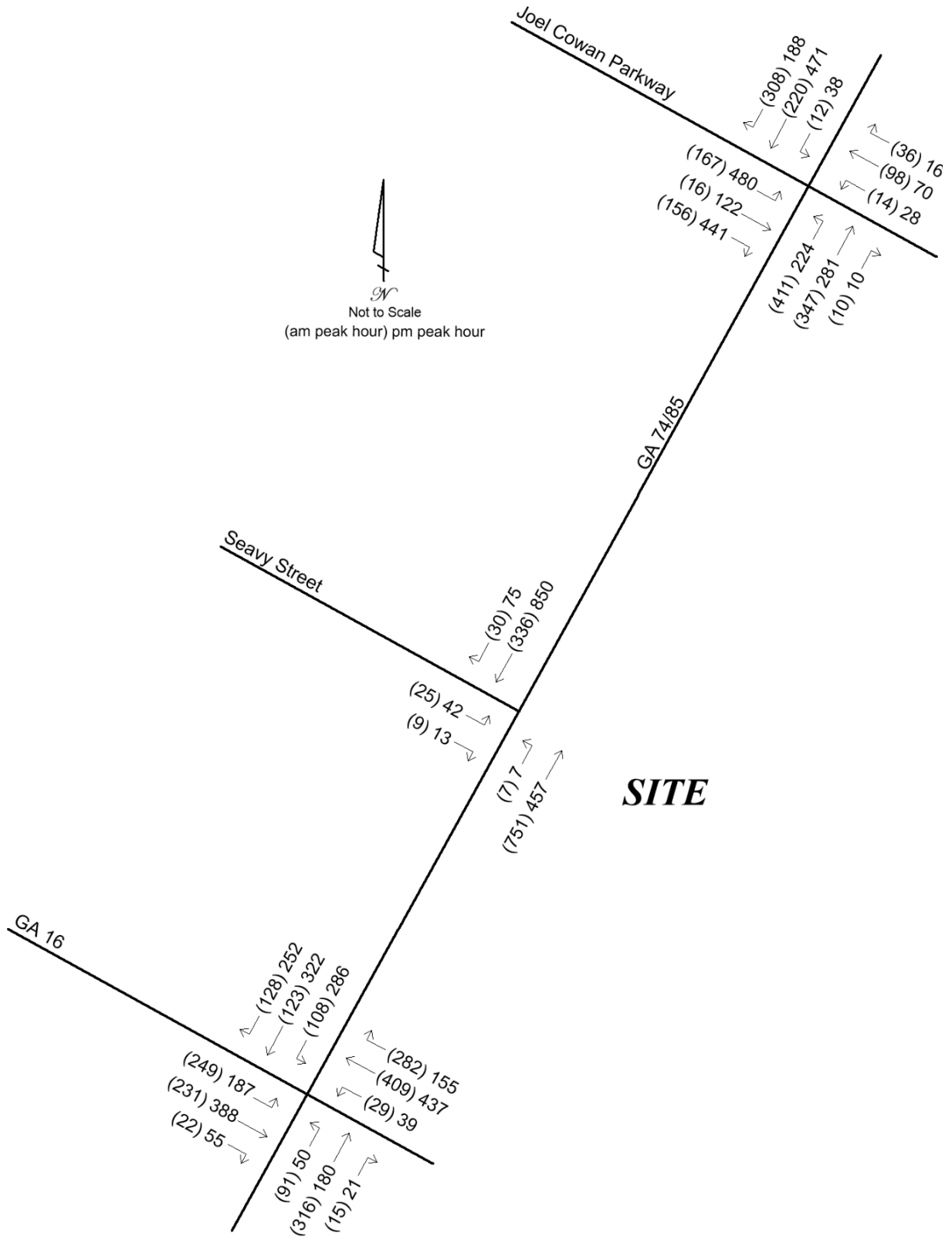


Figure 3 – Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersections using Synchro software, version 10, in accordance with the methodology presented in the Transportation Research Board's 2016 *Highway Capacity Manual (HCM 6)*. This methodology is presented in Appendix B. The results of the analysis are shown in Table 1. Computer printouts containing detailed results of the existing analysis are located in Appendix C. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 1 – Existing Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. GA 16 at GA 85 (signal)	C	30.8	C	28.9
northbound approach	C	30.5	C	26.0
southbound approach	C	21.9	C	23.4
eastbound approach	C	24.9	C	25.9
westbound approach	D	41.8	D	40.4
2. GA 74/85 at Seavy Street (side street stop)	A	0.8	A	1.3
northbound left turn	A	8.1	B	10.1
eastbound left turn	C	24.7	E	37.9
eastbound right turn	B	10.3	C	16.1
3. GA 74/85 at Joel Cowan Parkway / Padgett Road (signal)	B	17.4	D	42.3
northbound approach (GA 74/85)	A	9.9	C	22.5
southbound approach (GA 85)	B	19.5	D	47.6
eastbound approach (Joel Cowan Parkway)	C	31.5	D	53.3
westbound approach (Padgett Road)	C	34.1	D	47.6

The existing analysis reveals generally acceptable traffic operating conditions at all study intersections, approaches, and movements. The one failing location is the eastbound left turn from Seavy Street at GA 74/85 in the p.m. peak hour. Higher delays on minor street stop sign controlled approaches at busy thoroughfares such as GA 74/85 are not uncommon. Because the failure is only LOS E (and not LOS F) for one movement during one time period, no mitigation is recommended. However, this result suggests that, as volumes grow at this intersection, a change in control may become necessary. No mitigation is identified for the other study intersections for the existing condition.

No-Build Traffic Conditions

A 2028 no-build condition was developed. This represents the traffic conditions that will exist in the future at the anticipated date of the build-out of the manufacturing development, but not including the project's trips. The purpose of the analysis of this condition is to isolate the traffic impacts of the proposed development from background growth in volumes that are expected to occur in the area while the project is under construction.

In order to develop no-build volumes, background growth factors were developed using historic Georgia DOT 24-hour traffic counts that were collected in this area for the years 2017 through 2021, as shown in Table 2.

Table 2 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	GA 74/85 N of Seavy	Annual Growth	GA 16 W of GA 74/85	Annual Growth	GA 75/85 S of Joel Cowan	Annual Growth
Station ID	077-0378		077-0334		113-0134	
2017	12,600		11,800		13,000	
2018	12,600	0.0%	12,400	5.1%	13,300	2.3%
2019	13,000	3.2%	12,500	0.8%	13,400	0.8%
2020	12,000	-7.7%	14,500	16.0%	13,100	-2.2%
2021	13,700	14.2%	15,700	8.3%	14,200	8.4%
<i>avg growth</i>		<i>1.7%</i>		<i>5.9%</i>		<i>1.8%</i>

Growth in the area has been moderate. Two of the three count locations experienced a decrease from 2019 to 2020, which is considered an anomaly due to the pandemic. The subsequent year saw a return to volumes all notably higher than pre-pandemic. Based on the growth trends identified in Table 2 and taking the pandemic into consideration, a modest 2.0% annual growth factor was applied to the existing volumes to project the future no-build volumes. The growth factor was applied for five years, for a total of 10.4% growth that will occur while the proposed manufacturing development is under construction.

In addition to the background growth, the specific trips from two other significant nearby developments were added – the Keg Creek subdivision which is currently under construction on Seavy Street and the proposed Luther Bailey multi-use development on GA 16 at Plyant Street. The trips from the Keg Creek project were developed in the traffic impact study for that development prepared by Marc R Acampora, PE, LLC, dated October 30, 2017, while the trips from the Luther Bailey project were developed in its traffic impact study, prepared by Marc R Acampora, PE, LLC, dated December 28, 2022. It is noted that the Keg Creek subdivision is currently under development and generating a small volume of trips. However, the traffic volumes currently turning onto and out from Seavy Street at GA 74/85 are generally comparable to those counted for the 2017 Keg Creek study, indicating low growth in side street volumes. Therefore 100% of the projected Keg Creek trips from that traffic study were applied in this current traffic study. The existing traffic volumes, increased by the 10.4% growth factor, plus the Keg Creek and Luther Bailey trips, combine to produce the 2028 no-build volumes at each study intersection. These are the traffic volumes that will be on the roadway network in the future when the proposed manufacturing project is completely developed, but excluding the project's trips. Appendix A contains traffic volume worksheets that show the background growth and the trips for the two other developments.

Programmed and Planned Transportation Infrastructure Improvements

The Georgia DOT projects website and the Coweta County Comprehensive Transportation Plan (CTP, October 2021) were researched for planned (anticipated) or programmed (funded and scheduled) transportation improvement projects. Other than the current realignment of Seavy Street and intersection improvements at the GA 74/85 / Seavy intersection and the current improving of GA 74/85 at GA 16, no projects were identified at the study intersections and the immediately adjacent roadways.

No-Build Intersection Operations

The no-build condition includes the no-build traffic volumes, as described above. These were entered into the Synchro model and the 2028 no-build traffic operations were analyzed at the study intersections using Synchro 10 software in accordance with the HCM 6 methodology. The results of the no-build analysis are shown in Table 3. Computer printouts containing detailed results of the no-build analysis are located in Appendix D. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 3 – No-Build Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. GA 16 at GA 85 (signal)	D	40.7	D	42.0
northbound approach	D	43.0	D	36.6
southbound approach	C	31.3	D	45.6
eastbound approach	C	33.2	D	36.6
westbound approach	D	52.9	D	47.6
2. GA 74/85 at Seavy Street (side street stop)	A	7.4	A	1.3
northbound left turn	A	8.4	B	10.1
eastbound left turn	F	82.2	E	37.9
eastbound right turn	B	11.1	C	16.1
3. GA 74/85 at Joel Cowan Parkway / Padgett Road (signal)	C	22.8	F	80.6
northbound approach (GA 74/85)	B	12.6	D	52.2
southbound approach (GA 85)	C	23.3	E	66.6
eastbound approach (Joel Cowan Parkway)	D	53.7	F	120.9
westbound approach (Padgett Road)	D	39.3	E	71.4

The no-build analysis shows notable increases in delays due to the background growth projected in the area. The GA 74/85 / GA 16 intersection will continue to operate acceptably. The GA 74/85 / Seavy Street intersection will see the side street left turn fail in both the a.m. and p.m. peaks. Mitigation would require a change in control to a signal or a roundabout. It is recommended that a signal warrant study be performed for this intersection to determine if and when signalization will become appropriate. The GA 74/85 / Joel Cowan Parkway intersection

will fail in the no-build p.m. peak. This is primarily due to the very heavy eastbound left and right turn volumes from Joel Cowan Parkway to northbound GA 85 and southbound GA 74/85. Mitigation could include the addition of a second eastbound left turn lane and a second eastbound right turn lane, plus an eastbound right turn overlap phase which would operate concurrently with the protected northbound left turn phase. There is some existing, striped-out width on the eastbound approach of Joel Cowan Parkway to accommodate some widening. With those additional lanes, this intersection will operate acceptably in the no-build condition. The improvements identified to mitigate no-build failures are recommended as system improvements, which are needed whether or not the proposed manufacturing development is built.

Project Traffic Characteristics

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

Project Description

The site will be developed with a mix of manufacturing, office, and shop facilities. Vehicular access will be provided at one location on GA 74/85 which will align with realigned Seavy Street. The site plan is presented in Figure 4. From Figure 4 the land uses can be seen to include a 150,000 ft² manufacturing facility, two general purposes uses with 10,000 ft² each, a shop use with 60,000 ft², an office use with 15,000 ft², and a combination shop/office use with 20,000 ft². This produces a total of 265,000 ft² of manufacturing and associated or support uses.

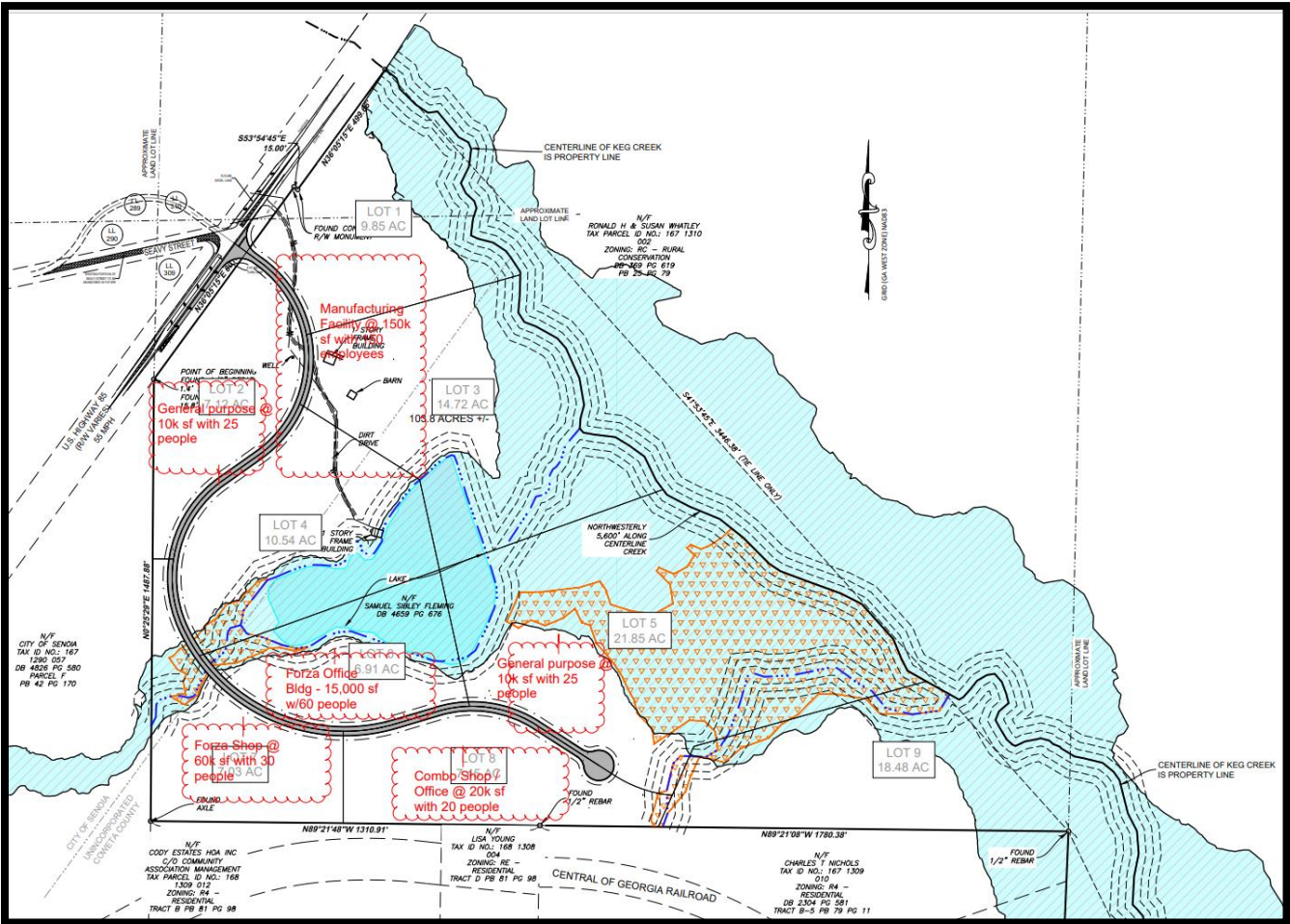


Figure 4 – Site Plan for Proposed Forza Manufacturing Development

Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed development. The volume of traffic that will be generated by the manufacturing development was calculated using the equations and rates in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (the current edition). ITE Land Use 140 – Manufacturing was chosen as representative of the project. The trips were separated by automobiles and trucks. The trip generation for the project is presented in Table 4.

Table 4 – Proposed Manufacturing Development Trip Generation

Land Use	ITE Code	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour
			In	Out	Total	In	Out	Total	2-Way
Manufacturing Auto Trips	140	265 ksf	126	37	163	63	142	205	1,080
Manufacturing Truck Trips	140	265 ksf	<u>4</u>	<u>4</u>	<u>8</u>	<u>3</u>	<u>5</u>	<u>8</u>	<u>120</u>
Manufacturing Total Trips	140	265 ksf	130	41	171	66	147	213	1,200

The proposed manufacturing development will generate 171 a.m. peak hour trips, 213 p.m. peak hour trips, and 1,200 weekday trips. The proportion of trucks is very low during the peak times. It is speculated that this is due to the scheduling of truck trips outside of the peak traffic time periods.

Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. Because the volume of trucks is low during the peak analysis time periods, one distribution was developed for all project trips. The trip distribution percentages were based on the locations and proximity of likely trip origins and destinations, which are areas of population density, and the routes of travel to and from those areas. The project trips, shown in Table 4, were assigned to the roadway network based on the distribution percentages. The trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the proposed manufacturing development are shown in Figure 5. Appendix A contains traffic volume worksheets that show the trips for each land use, at each intersection.

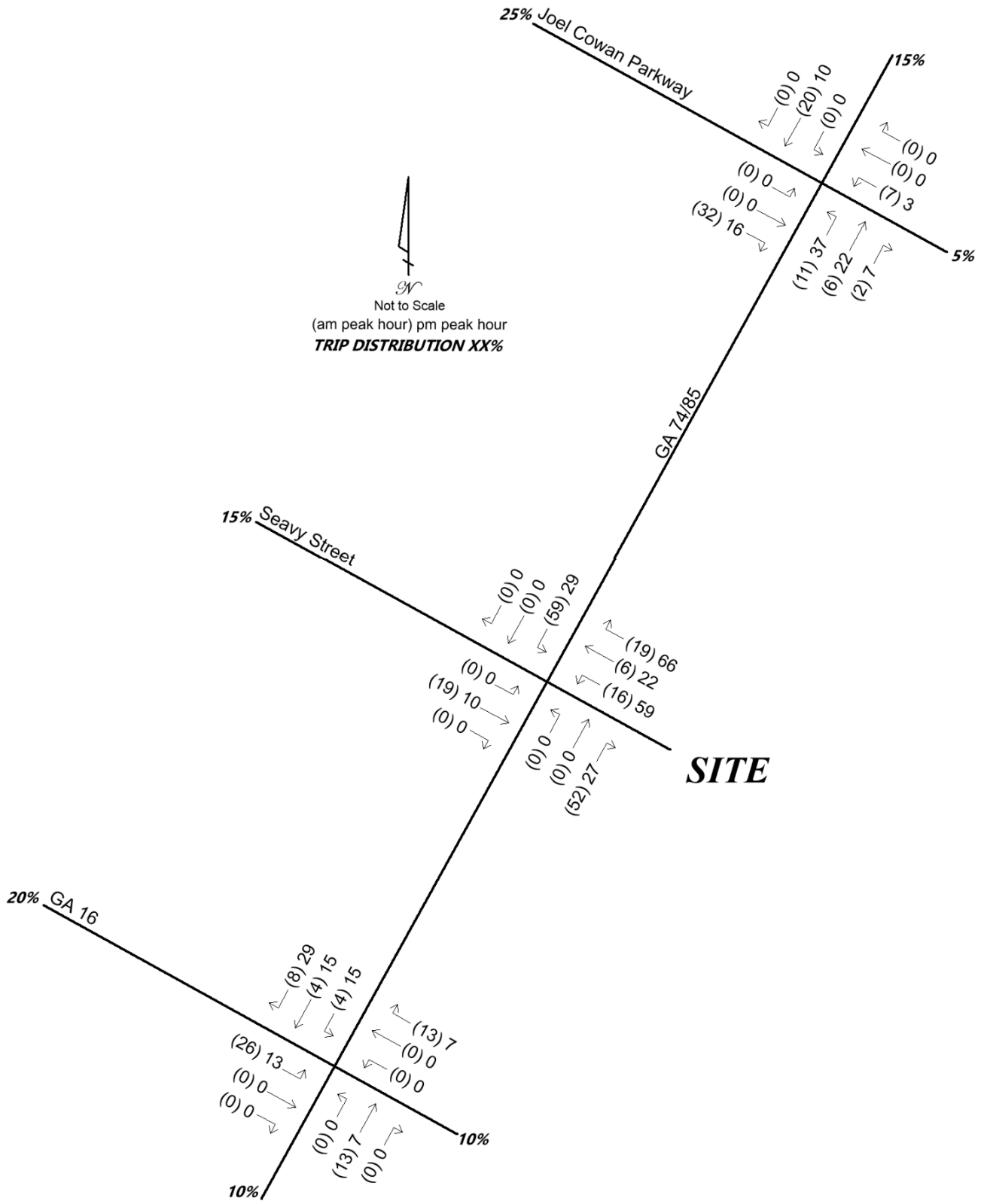


Figure 5 – Weekday A.M. and P.M. Peak Hour Project Trips and Distribution Percentages

Future Traffic Conditions

The future volumes consist of the no-build volumes plus the trips that will be generated by the proposed manufacturing facility. The future volumes are shown in Figure 6.

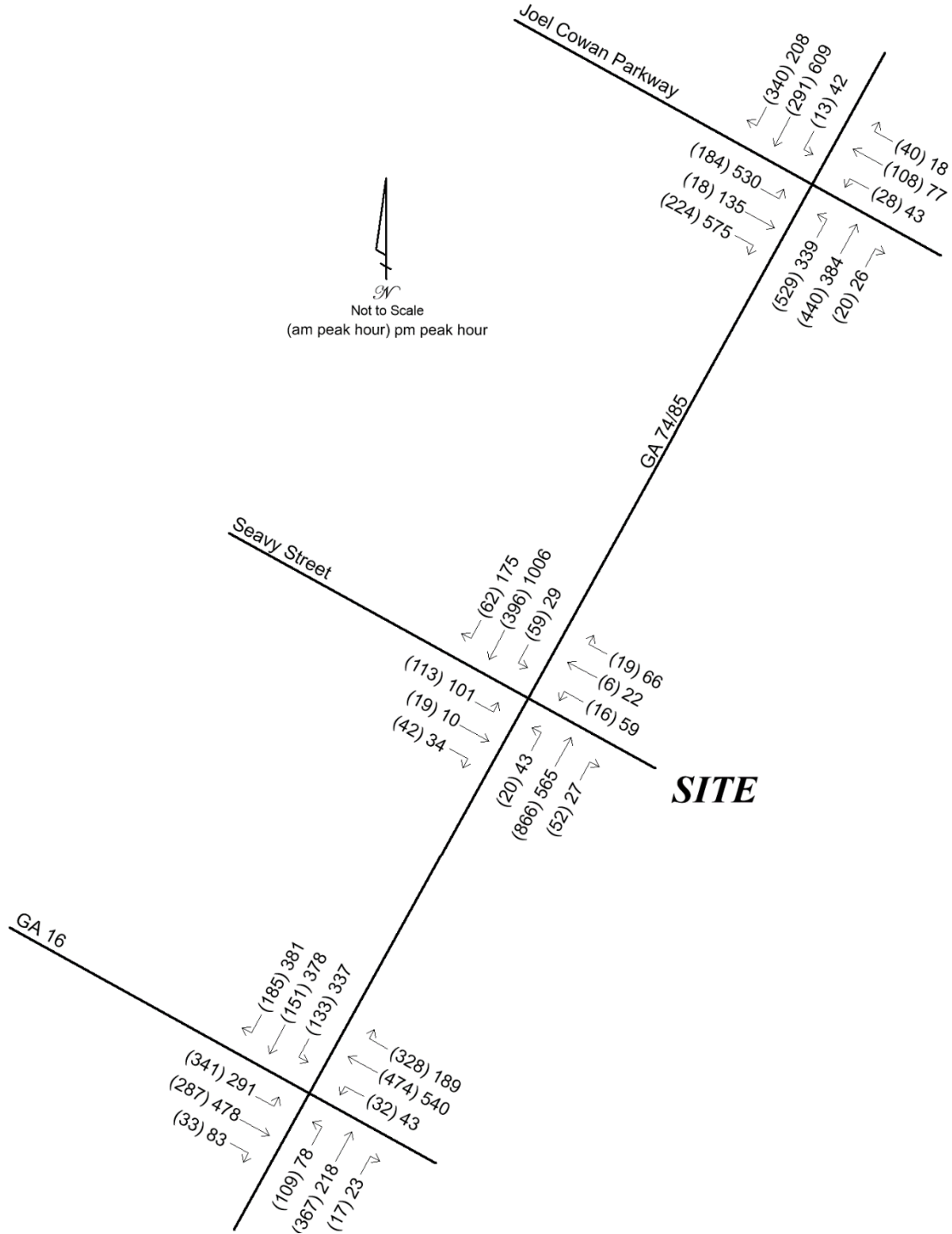


Figure 6 – Future Weekday A.M. and P.M. Peak Hour Volumes

Auxiliary Lane Requirements at Project Access

GA 74/85 falls under the jurisdiction of the Georgia DOT. Therefore, in order to determine if a northbound right turn lane or southbound left turn lane are required at the project access on GA 74/85, the Georgia DOT standards for determining the need for these auxiliary lanes, as set forth in their *Regulations for Driveway and Encroachment Control (Driveway Manual)*, revision 5.3 dated 11/1/2021, were reviewed.

The right turn lane analysis was based on *Driveway Manual* Table 4-6, Minimum Volumes Requiring Right Turn Lanes, which is shown below as Table 5.

Table 5 – Georgia DOT Right Turn Lane Standards

Posted Speed	2 Lane Routes		More than 2 Lanes on Main Road	
	AADT		AADT	
	< 6,000	>=6,000	<10,000	>=10,000
35 MPH or Less	200 RTV a day	100 RTV a day	200 RTV a day	100 RTV a day
40 to 50 MPH	150 RTV a day	75 RTV a day	150 RTV a day	75 RTV a day
55 to 60 MPH	100 RTV a day	50 RTV a day	100 RTV a day	50 RTV a day
>= 65 MPH	Always	Always	Always	Always

Table 4-6 Minimum Volumes Requiring Right Turn Lanes

The AADT on GA 74/85 was 13,700 vpd in 2021, which is above the 6,000 vpd threshold for a road with two lanes. For a 55 mph speed limit, above 6,000 vpd, the right turn volume (RTV) above which a right turn lane is required is 50 right turn vehicles (RTV) per day. The daily northbound right turn volume at the project access on GA 74/85 is calculated at 240 RTV. This volume is substantially higher than the 50 RTV threshold and, therefore, a northbound right turn lane is required on GA 74/85 at the project access.

The left turn lane analysis was based on *Driveway Manual* Table 4-7a, Minimum Volumes Requiring Left Turn Lanes, which is shown below as Table 6.

Table 6 – Georgia DOT Left Turn Lane Standards

LEFT TURN REQUIREMENTS-FULL CONSTRUCTION				
Posted Speed	2 Lane Routes		More than 2 Lanes on Main Road	
	ADT		ADT	
	<6,000	>=6,000	<10,000	>=10,000
35 MPH or Less	300 LTV a day	200 LTV a day	400 LTV a day	300 LTV a day
40 to 50 MPH	250 LTV a day	175 LTV a day	325 LTV a day	250 LTV a day
>= 55 MPH	200 LTV a day	150 LTV a day	250 LTV a day	200 LTV a day

Table 4-7a Minimum Volumes Requiring Left Turn Lanes

The AADT on GA 74/85 was 13,700 vpd in 2021, which is above the 6,000 vpd threshold for a road with two lanes. For a 55 mph speed limit, above 6,000 vpd, the left turn volume (LTV) above which a left turn lane is required is 150 left turn vehicles (LTV) per day. The daily southbound left turn volume at the project access on GA 74/85 is calculated at 270 LTV. This volume is higher than the 150 LTV threshold and, therefore, a southbound left turn lane is required on GA 74/85 at the project access.

Future Intersection Operations

An operational analysis was performed for the anticipated future project build-out at the study intersections and the project access. Table 7 presents the results of the future analysis. Computer printouts containing detailed results of the future analysis are located in Appendix E. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 7 – Future Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. GA 16 at GA 85 (signal)	D	44.7	D	46.2
northbound approach	D	51.9	D	46.3
southbound approach	D	36.1	D	49.8
eastbound approach	D	36.1	D	37.5
westbound approach	D	54.0	D	53.0
2. GA 74/85 at Seavy Street (side street stop)	E	48.1	F	99.5
northbound left turn	A	8.4	B	11.7
southbound left turn (entering project)	B	10.5	A	8.9
eastbound left/through	F	NA*	F	NA*
eastbound right turn	B	11.1	C	19.4
westbound left/through (exiting project)	F	78.5	F	NA*
westbound right turn (exiting project)	C	16.4	B	13.3
3. GA 74/85 at Joel Cowan Parkway / Padgett Road (signal)	C	24.0	F	90.0
northbound approach (GA 74/85)	B	17.1	E	58.7
southbound approach (GA 85)	C	29.3	E	67.0
eastbound approach (Joel Cowan Parkway)	D	35.0	F	146.7
westbound approach (Padgett Road)	D	38.9	E	65.7

*NA – limits of methodology exceeded

The future analysis with the addition of the proposed project's trips reveals that the same locations will fail as in the no-build condition – the side street stop sign controlled approaches of Seavy Street (and now the Forza exit) at GA 74/85 and GA 74/85 at Joel Cowan Parkway in the p.m. peak. The same mitigation identified in the no-build analysis will continue to be appropriate. Specifically, the GA 74/85 intersection at Seavy Street (and now the Forza exit) will require a change in control. A signal warrant analysis should be performed to determine if and when signalization will be warranted. At the GA 74/85 / Joel Cowan Parkway intersection, a second eastbound left turn lane, a second eastbound right turn lane, and an eastbound right turn overlap phase will allow the intersection to operate acceptably in the future condition.

The project access should be built with a northbound right turn lane on GA 74/85 and a southbound left turn lane on GA 74/85. Within the site, the access should include at least one entering lane and, exiting the site, a westbound left/through lane and a right turn lane.

The project civil/site engineer should comply with all applicable design standards at the project access including sight distances, turn lane storage and taper lengths, minimum driveway spacing, driveway widths, turn radii, islands, angles with the adjacent roadways, and grades.

Consideration should be given to extending the 45 mph speed limit zone, which currently begins south of Seavy Street and continues to the south to the 35 mph zone, to north of Seavy Street, so that the speed limit on GA 74/85 at the Seavy Street intersection is 45 mph instead of 55 mph.

Conclusions and Recommendations

This study assesses the traffic impact of a proposed manufacturing development in the City of Senoia. The site is located along the east side of GA 74/85 at its intersection with Seavy Street and will be developed with a mix of manufacturing, office, and shop facilities. Vehicular access will be provided at one location on GA 74/85 which will align with realigned Seavy Street. The following are the findings and recommendations of this study:

1. The existing analysis reveals generally acceptable operating conditions at the three study intersections. No mitigation is recommended for the existing condition.
2. Traffic volume growth in this area has been positive and moderate and this is expected to continue into the future. The no-build volumes include an annual increase of 2.0% for five years plus the trips from two other specific developments in the area.
3. No programmed or planned roadway improvement projects were identified at the three study intersections other than the current realignment of Seavy Street with associated lane improvements and the current improvements on GA 74/85 at GA 16.
4. In the no-build condition, the GA 74/85 / Seavy Street intersection will see the side street left turn fail in both the a.m. and p.m. peaks. Mitigation would require a change in control to a signal or a roundabout. It is recommended that a signal warrant study be performed for this intersection to determine if and when signalization will become appropriate.
5. The GA 74/85 / Joel Cowan Parkway intersection will fail in the no-build p.m. peak. Mitigation could include the addition of a second eastbound left turn lane and a second eastbound right turn lane, plus an eastbound right turn overlap phase which would operate concurrently with the protected northbound left turn phase. There is some existing, striped-out width on the eastbound approach of Joel Cowan Parkway to accommodate some widening. With those additional lanes, this intersection will operate acceptably in the no-build condition.
6. The improvements identified to mitigate no-build failures are recommended as system improvements, which are needed whether or not the proposed manufacturing development is built.
7. The proposed manufacturing development will generate 171 a.m. peak hour trips, 213 p.m. peak hour trips, and 1,200 weekday trips. The proportion of trucks will be low during the peak times.
8. The future analysis with the addition of the project's trips reveals modest increases in delays at the study intersections. No mitigation away from the project access is identified for the future build condition as a result of the proposed manufacturing development.
9. A northbound right turn lane and a southbound left turn lane are required on GA 74/85 at the project access.

10. The project access should be built with at least one entering lane and, exiting the site, a westbound left/through lane and a right turn lane.
11. The project civil/site engineer should comply with all applicable design standards at the project access including sight distances, turn lane storage and taper lengths, minimum driveway spacing, driveway widths, turn radii, islands, angles with the adjacent roadways, and grades.
12. Consideration should be given to extending the 45 mph speed limit zone, which currently begins south of Seavy Street and continues to the south to the 35 mph zone, to north of Seavy Street, so that the speed limit on GA 74/85 at the Seavy Street intersection is 45 mph instead of 55 mph.

Appendix A

Traffic Count Data and Volume Worksheets

Forza Manufacturing Development Traffic Impact Study
City of Senoia, Georgia

March 2023

Intersection: 1. GA 16 at GA 74/85

Weekday A.M. Peak Hour	Northbound GA 74/85				Southbound GA 74/85				Eastbound GA 16				Westbound GA 16			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 27, 2022 7:00-8:00)	91	316	15	422	108	123	128	359	249	231	22	502	29	409	282	720
Total Annual Background Growth	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Proposed Keg Creek Subdivision Trips	0	5	0	5	10	11	11	32	3	0	0	3	0	0	4	4
Proposed Luther Bailey Tract Trips	9	0	0	9	0	0	25	25	37	32	9	78	0	22	0	22
2028 No-Build Volumes	109	354	17	480	129	147	177	453	315	287	33	635	32	474	315	821
Forza Manufacturing Trips	0	13	0	13	4	4	8	16	26	0	0	26	0	0	13	13
Build Volumes	109	367	17	493	133	151	185	469	341	287	33	661	32	474	328	834

Weekday P.M. Peak Hour	Northbound GA 74/85				Southbound GA 74/85				Eastbound GA 16				Westbound GA 16			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 27, 2022 4:30-5:30)	50	180	21	251	286	322	252	860	187	388	55	630	39	437	155	631
Total Annual Background Growth	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Proposed Keg Creek Subdivision Trips	0	12	0	12	6	8	6	20	12	0	0	12	0	0	11	11
Proposed Luther Bailey Tract Trips	23	0	0	23	0	0	68	68	60	50	22	132	0	58	0	58
2028 No-Build Volumes	78	211	23	312	322	363	352	1037	278	478	83	840	43	540	182	766
Forza Manufacturing Trips	0	7	0	7	15	15	29	59	13	0	0	13	0	0	7	7
Build Volumes	78	218	23	319	337	378	381	1096	291	478	83	853	43	540	189	773

MARC R. ACAMPORA, PE, LLC

Forza Manufacturing Development Traffic Impact Study
City of Senoia, Georgia

March 2023

Intersection: 2. GA 74/85 at Seavy Street / Forza Access

Weekday A.M. Peak Hour

	Northbound GA 74/85				Southbound GA 74/85				Eastbound Seavy Street				Westbound Forza Access			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, February 23, 3023 7:15-8:15)	7	751		758		336	30	366	25		9	34				
Total Annual Background Growth	10.4%	10.4%			10.4%	10.4%			10.4%		10.4%					
Proposed Keg Creek Subdivision Trips	12	0		12	0	29		29	85		32		117			
Proposed Luther Bailey Tract Trips	0	37		37	25	0		25	0		0		0			
2028 No-Build Volumes	20	866		886	396	62		458	113		42		155			
Forza Manufacturing Trips	0	0	52	52	59	0	0	59	0	19	0	19	16	6	19	41
Build Volumes	20	866	52	938	59	396	62	517	113	19	42	174	16	6	19	41

Weekday P.M. Peak Hour

	Northbound GA 74/85				Southbound GA 74/85				Eastbound Seavy Street				Westbound Forza Access			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, February 23, 3023 5:00-6:00)	7	457		464		850	75	925	42		13	55				
Total Annual Background Growth	10.4%	10.4%			10.4%	10.4%			10.4%		10.4%					
Proposed Keg Creek Subdivision Trips	35	0		35	0	92		92	55		20		75			
Proposed Luther Bailey Tract Trips	0	60		60	68	0		68	0		0		0			
2028 No-Build Volumes	43	565		607	1006	175		1181	101		34		136			
Forza Manufacturing Trips	0	0	27	27	29	0	0	29	0	10	0	10	59	22	66	147
Build Volumes	43	565	27	634	29	1006	175	1210	101	10	34	146	59	22	66	147

MARC R. ACAMPORA, PE, LLC

Forza Manufacturing Development Traffic Impact Study
City of Senoia, Georgia

March 2023

Intersection: 3. GA 74/85 at Joel Cowan Parkway

Weekday A.M. Peak Hour	Northbound GA 74/85				Southbound GA 85				Eastbound Joel Cowan Parkway				Westbound Padgett Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, February 23, 3023 7:30-8:30)	411	347	10	768	12	220	308	540	167	16	156	339	14	98	36	148
Total Annual Background Growth	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Proposed Keg Creek Subdivision Trips	44	36	5	85	0	16	0	16	0	0	10	10	3	0	0	3
Proposed Luther Bailey Tract Trips	20	15	2	37	0	12	0	12	0	0	10	10	3	0	0	3
2028 No-Build Volumes	518	434	18	970	13	271	340	624	184	18	192	394	21	108	40	169
Forza Manufacturing Trips	11	6	2	19	0	20	0	20	0	0	32	32	7	0	0	7
Build Volumes	529	440	20	989	13	291	340	644	184	18	224	426	28	108	40	176

Weekday P.M. Peak Hour	Northbound GA 74/85				Southbound GA 85				Eastbound Joel Cowan Parkway				Westbound Padgett Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, February 23, 3023 5:00-6:00)	224	281	10	515	38	471	188	697	480	122	441	1043	28	70	16	114
Total Annual Background Growth	10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%		10.4%	10.4%	10.4%	
Proposed Keg Creek Subdivision Trips	23	27	5	55	0	45	0	45	0	0	42	42	5	0	0	5
Proposed Luther Bailey Tract Trips	32	25	3	60	0	34	0	34	0	0	30	30	4	0	0	4
2028 No-Build Volumes	302	362	19	684	42	599	208	848	530	135	559	1223	40	77	18	135
Forza Manufacturing Trips	37	22	7	66	0	10	0	10	0	0	16	16	3	0	0	3
Build Volumes	339	384	26	750	42	609	208	858	530	135	575	1239	43	77	18	138

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TMC Data
 GA16 @ GA74/GA85
 Senoia, GA
 7-9 AM | 4-6 PM

File Name : 47130004
 Site Code : 47130004
 Start Date : 10/27/2022
 Page No : 1

Groups Printed- Cars, Buses and Trucks

Start Time	GA74 / GA85 Northbound					GA74 / GA85 Southbound					GA 16 Eastbound					GA 16 Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	25	69	2	0	96	24	18	41	0	83	50	40	4	0	94	9	97	81	0	187	460
07:15 AM	22	81	3	0	106	25	31	30	0	86	78	61	7	0	146	4	100	60	0	164	502
07:30 AM	20	86	4	0	110	28	34	32	0	94	56	69	5	0	130	13	113	81	0	207	541
07:45 AM	24	80	6	0	110	31	40	25	0	96	65	61	6	0	132	3	99	60	0	162	500
Total	91	316	15	0	422	108	123	128	0	359	249	231	22	0	502	29	409	282	0	720	2003
08:00 AM	20	76	14	0	110	35	23	35	0	93	57	68	8	0	133	4	75	43	0	122	458
08:15 AM	12	57	4	0	73	27	24	46	0	97	63	66	12	0	141	1	80	49	0	130	441
08:30 AM	18	69	4	0	91	28	26	35	0	89	50	61	8	0	119	7	96	46	0	149	448
08:45 AM	15	44	7	0	66	27	33	37	0	97	58	50	13	0	121	1	52	38	0	91	375
Total	65	246	29	0	340	117	106	153	0	376	228	245	41	0	514	13	303	176	0	492	1722
*** BREAK ***																					
04:00 PM	12	29	9	0	50	70	82	44	0	196	40	99	12	0	151	15	86	28	0	129	526
04:15 PM	16	47	3	0	66	79	75	63	0	217	43	65	11	0	119	6	90	24	0	120	522
04:30 PM	8	41	5	0	54	64	81	75	0	220	51	84	14	0	149	7	130	34	0	171	594
04:45 PM	13	50	7	0	70	75	84	64	0	223	48	93	10	0	151	10	99	30	0	139	583
Total	49	167	24	0	240	288	322	246	0	856	182	341	47	0	570	38	405	116	0	559	2225
05:00 PM	12	40	5	0	57	77	67	64	0	208	42	112	14	0	168	12	112	51	0	175	608
05:15 PM	17	49	4	0	70	70	90	49	0	209	46	99	17	0	162	10	96	40	0	146	587
05:30 PM	11	49	10	0	70	75	98	42	0	215	63	91	19	0	173	10	77	45	0	132	590
05:45 PM	6	31	6	0	43	95	96	59	0	250	50	88	15	0	153	10	86	28	0	124	570
Total	46	169	25	0	240	317	351	214	0	882	201	390	65	0	656	42	371	164	0	577	2355
Grand Total	251	898	93	0	1242	830	902	741	0	2473	860	1207	175	0	2242	122	1488	738	0	2348	8305
Apprch %	20.2	72.3	7.5	0		33.6	36.5	30	0		38.4	53.8	7.8	0		5.2	63.4	31.4	0		
Total %	3	10.8	1.1	0	15	10	10.9	8.9	0	29.8	10.4	14.5	2.1	0	27	1.5	17.9	8.9	0	28.3	

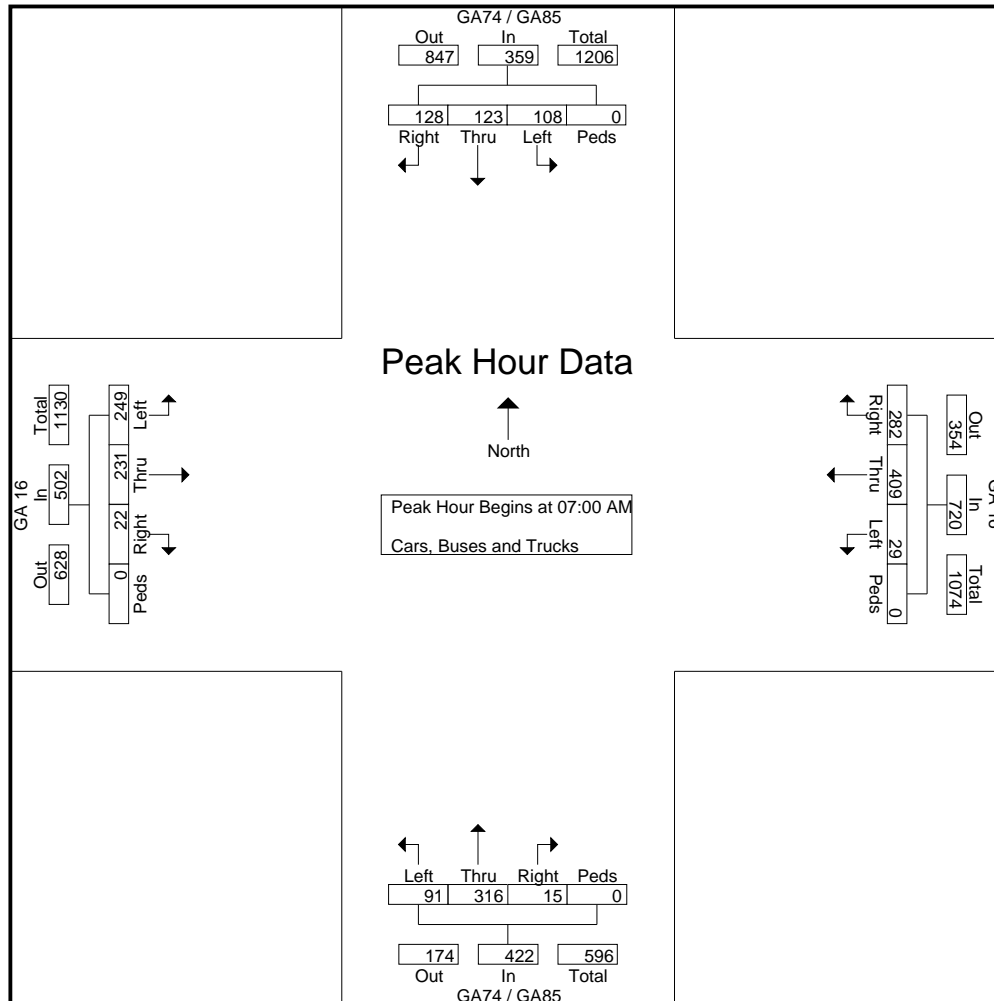
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TMC Data
 GA16 @ GA74/GA85
 Senoia, GA
 7-9 AM | 4-6 PM

File Name : 47130004
 Site Code : 47130004
 Start Date : 10/27/2022
 Page No : 2

Start Time	GA74 / GA85 Northbound					GA74 / GA85 Southbound					GA 16 Eastbound					GA 16 Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	25	69	2	0	96	24	18	41	0	83	50	40	4	0	94	9	97	81	0	187	460
07:15 AM	22	81	3	0	106	25	31	30	0	86	78	61	7	0	146	4	100	60	0	164	502
07:30 AM	20	86	4	0	110	28	34	32	0	94	56	69	5	0	130	13	113	81	0	207	541
07:45 AM	24	80	6	0	110	31	40	25	0	96	65	61	6	0	132	3	99	60	0	162	500
Total Volume	91	316	15	0	422	108	123	128	0	359	249	231	22	0	502	29	409	282	0	720	2003
% App. Total	21.6	74.9				30.1	34.3	35.7			49.6					56.8	39.2				
PHF	.910	.919	.625	.000	.959	.871	.769	.780	.000	.935	.798	.837	.786	.000	.860	.558	.905	.870	.000	.870	.926



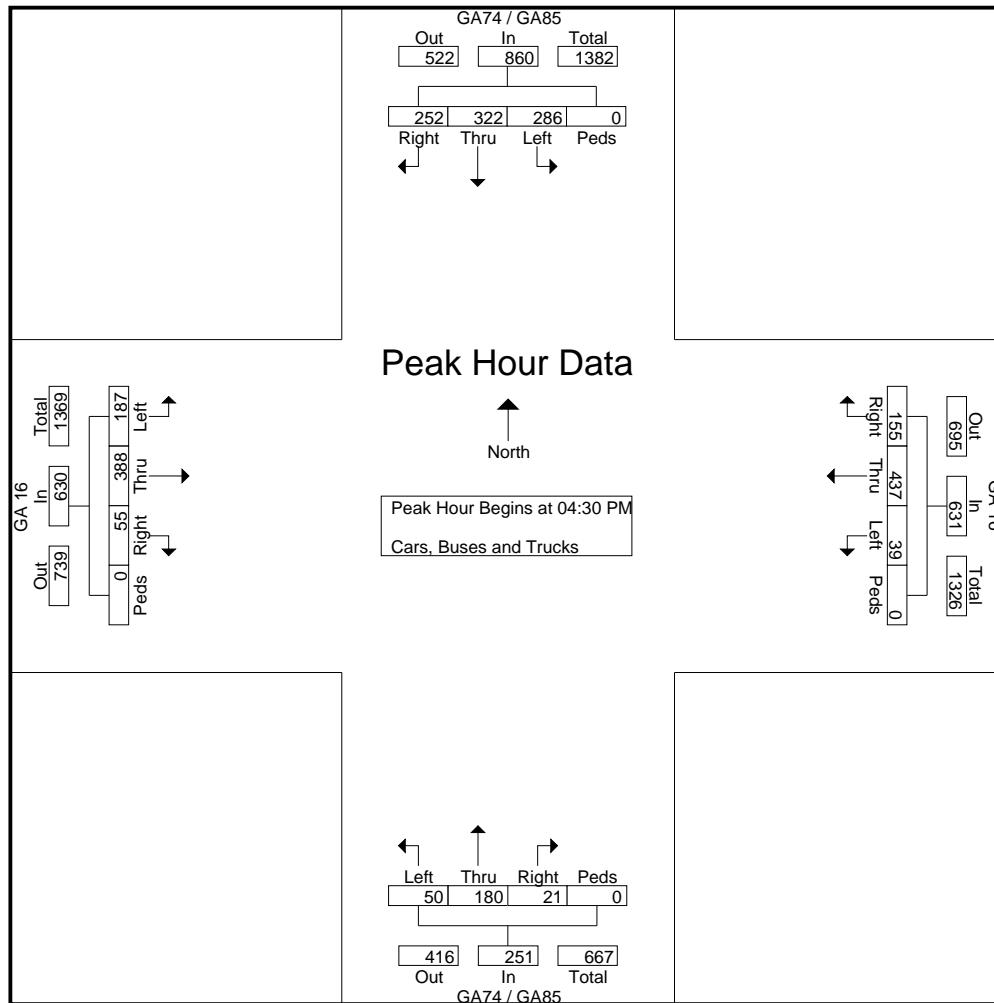
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TMC Data
 GA16 @ GA74/GA85
 Senoia, GA
 7-9 AM | 4-6 PM

File Name : 47130004
 Site Code : 47130004
 Start Date : 10/27/2022
 Page No : 3

Start Time	GA74 / GA85 Northbound					GA74 / GA85 Southbound					GA 16 Eastbound					GA 16 Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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	8	41	5	0	54	64	81	75	0	220	51	84	14	0	149	7	130	34	0	171	594
04:45 PM	13	50	7	0	70	75	84	64	0	223	48	93	10	0	151	10	99	30	0	139	583
05:00 PM	12	40	5	0	57	77	67	64	0	208	42	112	14	0	168	12	112	51	0	175	608
05:15 PM	17	49	4	0	70	70	90	49	0	209	46	99	17	0	162	10	96	40	0	146	587
Total Volume	50	180	21	0	251	286	322	252	0	860	187	388	55	0	630	39	437	155	0	631	2372
% App. Total	19.9	71.7				33.3	37.4	29.3			29.7	61.6				69.3	24.6				
PHF	.735	.900	.750	.000	.896	.929	.894	.840	.000	.964	.917	.866	.809	.000	.938	.813	.840	.760	.000	.901	.975



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TMC Data
 SR74/SR85 @ Seavy St
 Senoia, GA
 7 am - 7 pm

File Name : 47470001
 Site Code : 47470001
 Start Date : 2/23/2023
 Page No : 1

Groups Printed- Cars, Buses and Trucks

Start Time	SR74/SR85 Northbound					SR74/SR85 Southbound					Seavy St Eastbound					Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	146	0	0	146	0	81	6	0	87	10	0	0	0	10	0	0	0	0	0	243
07:15 AM	1	178	0	0	179	0	85	7	0	92	7	0	3	0	10	0	0	0	0	0	281
07:30 AM	1	192	0	0	193	0	88	7	0	95	7	0	1	0	8	0	0	0	0	0	296
07:45 AM	2	197	0	0	199	0	85	11	0	96	2	0	3	0	5	0	0	0	0	0	300
Total	4	713	0	0	717	0	339	31	0	370	26	0	7	0	33	0	0	0	0	0	1120
08:00 AM	3	184	0	0	187	0	78	5	0	83	9	0	2	0	11	0	0	0	0	0	281
08:15 AM	2	161	0	0	163	0	80	2	0	82	9	0	1	0	10	0	0	0	0	0	255
08:30 AM	1	166	0	0	167	0	70	8	0	78	8	0	2	0	10	0	0	0	0	0	255
08:45 AM	2	143	0	0	145	0	59	12	0	71	9	0	1	0	10	0	0	0	0	0	226
Total	8	654	0	0	662	0	287	27	0	314	35	0	6	0	41	0	0	0	0	0	1017
09:00 AM	1	127	0	0	128	0	96	13	0	109	9	0	0	0	9	0	0	0	0	0	246
09:15 AM	2	106	0	0	108	0	75	12	0	87	8	0	0	0	8	0	0	0	0	0	203
09:30 AM	3	119	0	0	122	0	84	7	0	91	7	0	2	0	9	0	0	0	0	0	222
09:45 AM	1	122	0	0	123	0	89	5	0	94	5	0	1	0	6	0	0	0	0	0	223
Total	7	474	0	0	481	0	344	37	0	381	29	0	3	0	32	0	0	0	0	0	894
10:00 AM	2	101	0	0	103	0	86	6	0	92	9	0	0	0	9	0	0	0	0	0	204
10:15 AM	2	99	0	0	101	0	54	15	0	69	2	0	5	0	7	0	0	0	0	0	177
10:30 AM	2	96	0	0	98	0	96	10	0	106	4	0	3	0	7	0	0	0	0	0	211
10:45 AM	4	97	0	0	101	0	79	7	0	86	3	0	4	0	7	0	0	0	0	0	194
Total	10	393	0	0	403	0	315	38	0	353	18	0	12	0	30	0	0	0	0	0	786
11:00 AM	1	70	0	0	71	0	88	7	0	95	3	0	4	0	7	0	0	0	0	0	173
11:15 AM	2	69	0	0	71	0	94	5	0	99	2	0	4	0	6	0	0	0	0	0	176
11:30 AM	4	74	0	0	78	0	98	5	0	103	5	0	6	0	11	0	0	0	0	0	192
11:45 AM	4	85	0	0	89	0	84	9	0	93	11	0	4	0	15	0	0	0	0	0	197
Total	11	298	0	0	309	0	364	26	0	390	21	0	18	0	39	0	0	0	0	0	738
12:00 PM	4	73	0	0	77	0	112	14	0	126	1	0	6	0	7	0	0	0	0	0	210
12:15 PM	1	109	0	0	110	0	107	8	0	115	4	0	5	0	9	0	0	0	0	0	234
12:30 PM	2	93	0	0	95	0	110	8	0	118	3	0	5	0	8	0	0	0	0	0	221
12:45 PM	4	102	0	0	106	0	113	3	0	116	11	0	5	0	16	0	0	0	0	0	238
Total	11	377	0	0	388	0	442	33	0	475	19	0	21	0	40	0	0	0	0	0	903
01:00 PM	5	94	0	0	99	0	125	12	0	137	11	0	3	0	14	0	0	0	0	0	250
01:15 PM	3	100	0	0	103	0	103	10	0	113	4	0	3	0	7	0	0	0	0	0	223
01:30 PM	2	99	0	0	101	0	83	8	0	91	5	0	2	0	7	0	0	0	0	0	199
01:45 PM	5	103	0	0	108	0	123	13	0	136	8	0	4	0	12	0	0	0	0	0	256
Total	15	396	0	0	411	0	434	43	0	477	28	0	12	0	40	0	0	0	0	0	928
02:00 PM	2	83	0	0	85	0	128	7	0	135	9	0	4	0	13	0	0	0	0	0	233
02:15 PM	4	102	0	0	106	0	126	6	0	132	8	0	5	0	13	0	0	0	0	0	251
02:30 PM	1	91	0	0	92	0	127	8	0	135	6	0	2	0	8	0	0	0	0	0	235
02:45 PM	4	101	0	0	105	0	127	7	0	134	4	0	2	0	6	0	0	0	0	0	245
Total	11	377	0	0	388	0	508	28	0	536	27	0	13	0	40	0	0	0	0	0	964
03:00 PM	5	89	0	0	94	0	136	13	0	149	6	0	3	0	9	0	0	0	0	0	252
03:15 PM	6	105	0	0	111	0	140	10	0	150	7	0	2	0	9	0	0	0	0	0	270
03:30 PM	1	104	0	0	105	0	147	12	0	159	4	0	5	0	9	0	0	0	0	0	273
03:45 PM	2	101	0	0	103	0	177	17	0	194	12	0	7	0	19	0	0	0	0	0	316
Total	14	399	0	0	413	0	600	52	0	652	29	0	17	0	46	0	0	0	0	0	1111

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TMC Data
 SR74/SR85 @ Seavy St
 Senoia, GA
 7 am - 7 pm

File Name : 47470001
 Site Code : 47470001
 Start Date : 2/23/2023
 Page No : 2

Groups Printed- Cars, Buses and Trucks

Start Time	SR74/SR85 Northbound					SR74/SR85 Southbound					Seavy St Eastbound					Westbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
04:00 PM	1	114	0	0	115	0	174	14	0	188	15	0	4	0	19	0	0	0	0	0	0	322
04:15 PM	1	93	0	0	94	0	191	10	0	201	7	0	3	0	10	0	0	0	0	0	0	305
04:30 PM	2	98	0	0	100	0	182	20	0	202	18	0	5	0	23	0	0	0	0	0	0	325
04:45 PM	7	107	0	0	114	0	188	18	0	206	10	0	0	0	10	0	0	0	0	0	0	330
Total	11	412	0	0	423	0	735	62	0	797	50	0	12	0	62	0	0	0	0	0	0	1282
05:00 PM	2	113	0	0	115	0	212	15	0	227	10	0	5	0	15	0	0	0	0	0	0	357
05:15 PM	3	119	0	0	122	0	226	17	0	243	13	0	1	0	14	0	0	0	0	0	0	379
05:30 PM	1	123	0	0	124	0	211	23	0	234	11	0	4	0	15	0	0	0	0	0	0	373
05:45 PM	1	102	0	0	103	0	201	20	0	221	8	0	3	0	11	0	0	0	0	0	0	335
Total	7	457	0	0	464	0	850	75	0	925	42	0	13	0	55	0	0	0	0	0	0	1444
06:00 PM	3	86	0	0	89	0	158	19	0	177	11	0	4	0	15	0	0	0	0	0	0	281
06:15 PM	3	77	0	0	80	0	142	13	0	155	11	0	5	0	16	0	0	0	0	0	0	251
06:30 PM	1	74	0	0	75	0	130	17	0	147	9	0	5	0	14	0	0	0	0	0	0	236
06:45 PM	2	85	0	0	87	0	87	6	0	93	8	0	2	0	10	0	0	0	0	0	0	190
Total	9	322	0	0	331	0	517	55	0	572	39	0	16	0	55	0	0	0	0	0	0	958
Grand Total	118	5272	0	0	5390	0	5735	507	0	6242	363	0	150	0	513	0	0	0	0	0	0	12145
Apprch %	2.2	97.8	0	0		0	91.9	8.1	0		70.8	0	29.2	0		0	0	0	0	0		
Total %	1	43.4	0	0	44.4	0	47.2	4.2	0	51.4	3	0	1.2	0	4.2	0	0	0	0	0		

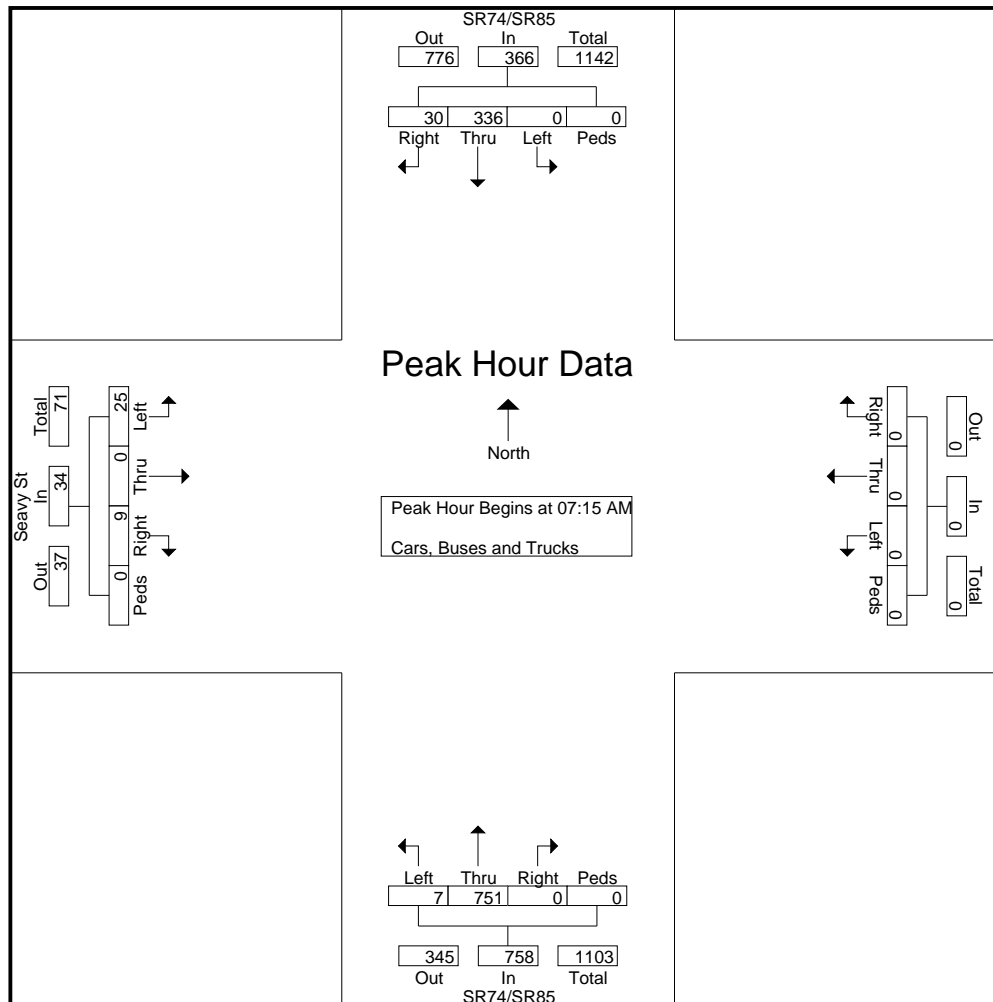
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TMC Data
 SR74/SR85 @ Seavy St
 Senoia, GA
 7 am - 7 pm

File Name : 47470001
 Site Code : 47470001
 Start Date : 2/23/2023
 Page No : 3

Start Time	SR74/SR85 Northbound					SR74/SR85 Southbound					Seavy St Eastbound					Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	178	0	0	179	0	85	7	0	92	7	0	3	0	10	0	0	0	0	0	281
07:30 AM	1	192	0	0	193	0	88	7	0	95	7	0	1	0	8	0	0	0	0	0	296
07:45 AM	2	197	0	0	199	0	85	11	0	96	2	0	3	0	5	0	0	0	0	0	300
08:00 AM	3	184	0	0	187	0	78	5	0	83	9	0	2	0	11	0	0	0	0	0	281
Total Volume	7	751	0	0	758	0	336	30	0	366	25	0	9	0	34	0	0	0	0	0	1158
% App. Total	99.1					91.8					73.5					26.5					
PHF	.583	.953	.000	.000	.952	.000	.955	.682	.000	.953	.694	.000	.750	.000	.773	.000	.000	.000	.000	.000	.965



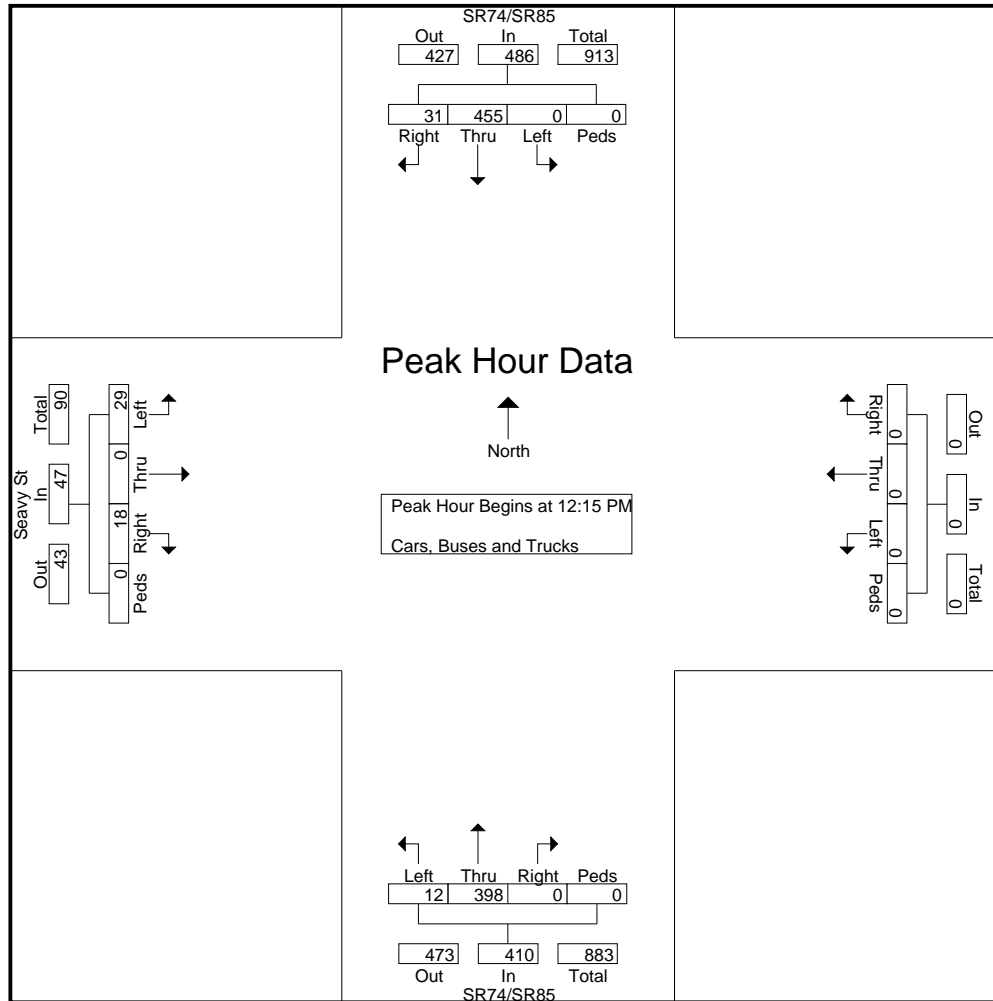
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TMC Data
 SR74/SR85 @ Seavy St
 Senoia, GA
 7 am - 7 pm

File Name : 47470001
 Site Code : 47470001
 Start Date : 2/23/2023
 Page No : 4

Start Time	SR74/SR85 Northbound					SR74/SR85 Southbound					Seavy St Eastbound					Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	1	109	0	0	110	0	107	8	0	115	4	0	5	0	9	0	0	0	0	0	234
12:30 PM	2	93	0	0	95	0	110	8	0	118	3	0	5	0	8	0	0	0	0	0	221
12:45 PM	4	102	0	0	106	0	113	3	0	116	11	0	5	0	16	0	0	0	0	0	238
01:00 PM	5	94	0	0	99	0	125	12	0	137	11	0	3	0	14	0	0	0	0	0	250
Total Volume	12	398	0	0	410	0	455	31	0	486	29	0	18	0	47	0	0	0	0	0	943
% App. Total	97.1					93.6					61.7					38.3					
PHF	.600	.913	.000	.000	.932	.000	.910	.646	.000	.887	.659	.000	.900	.000	.734	.000	.000	.000	.000	.000	.943



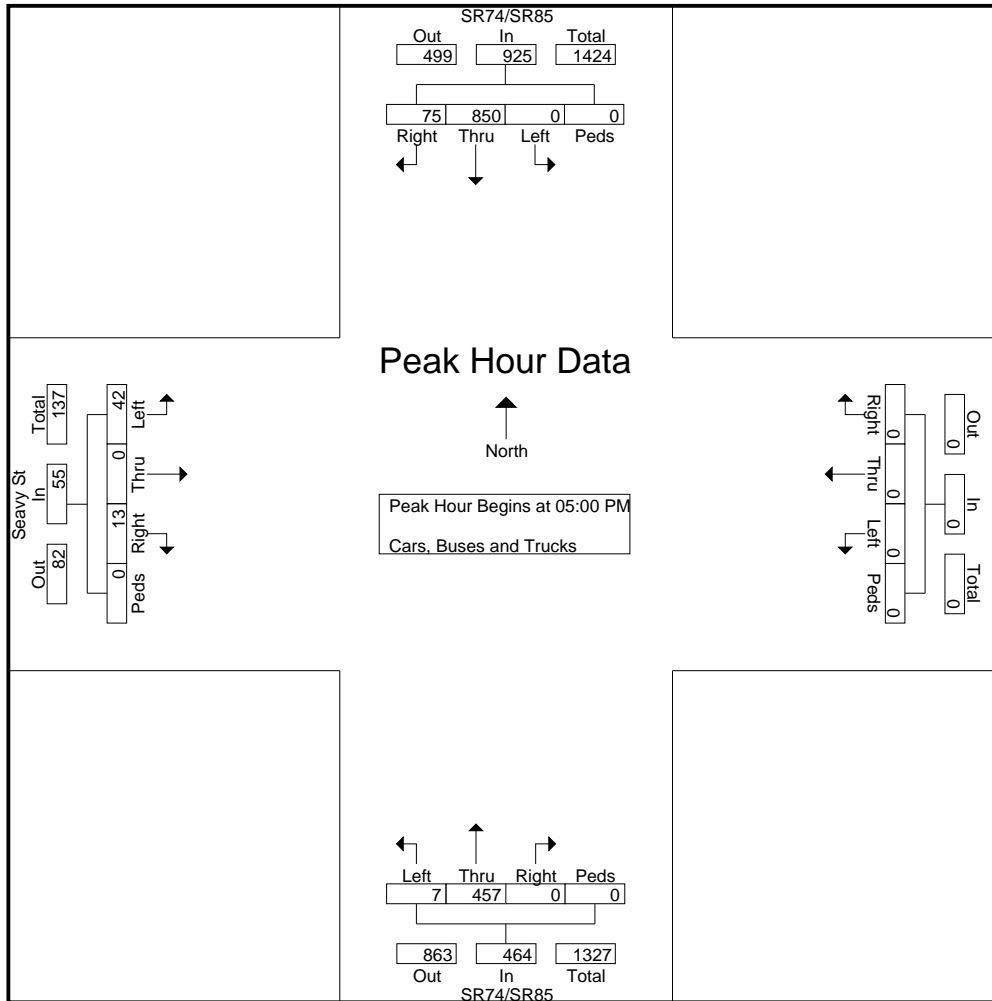
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TMC Data
 SR74/SR85 @ Seavy St
 Senoia, GA
 7 am - 7 pm

File Name : 47470001
 Site Code : 47470001
 Start Date : 2/23/2023
 Page No : 5

Start Time	SR74/SR85 Northbound					SR74/SR85 Southbound					Seavy St Eastbound					Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	113	0	0	115	0	212	15	0	227	10	0	5	0	15	0	0	0	0	0	357
05:15 PM	3	119	0	0	122	0	226	17	0	243	13	0	1	0	14	0	0	0	0	0	379
05:30 PM	1	123	0	0	124	0	211	23	0	234	11	0	4	0	15	0	0	0	0	0	373
05:45 PM	1	102	0	0	103	0	201	20	0	221	8	0	3	0	11	0	0	0	0	0	335
Total Volume	7	457	0	0	464	0	850	75	0	925	42	0	13	0	55	0	0	0	0	0	1444
% App. Total	98.5					91.9					76.4					23.6					
PHF	.583	.929	.000	.000	.935	.000	.940	.815	.000	.952	.808	.000	.650	.000	.917	.000	.000	.000	.000	.000	.953



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TMC Data
 SR74/SR85 @ Joel Cowan Pkwy/Padgett Rd
 Senoia, GA
 7-9 AM | 4-6 PM

File Name : 47470002
 Site Code : 47470002
 Start Date : 2/23/2023
 Page No : 1

Groups Printed- Cars, Buses and Trucks

Start Time	SR74/SR85 Northbound					SR 85 Southbound					SR 74 Eastbound					Padgett Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	65	108	0	0	173	0	55	60	0	115	30	3	38	0	71	7	21	2	0	30	389
07:15 AM	81	97	0	0	178	1	57	73	0	131	49	2	39	0	90	1	27	6	0	34	433
07:30 AM	107	105	2	0	214	4	70	79	0	153	34	4	39	0	77	4	29	19	0	52	496
07:45 AM	124	64	2	0	190	2	56	82	0	140	35	5	29	0	69	4	30	6	0	40	439
Total	377	374	4	0	755	7	238	294	0	539	148	14	145	0	307	16	107	33	0	156	1757
08:00 AM	86	95	4	0	185	2	48	75	0	125	38	2	46	0	86	2	24	4	0	30	426
08:15 AM	94	83	2	0	179	4	46	72	0	122	60	5	42	0	107	4	15	7	0	26	434
08:30 AM	99	79	6	0	184	0	41	69	0	110	38	7	37	0	82	4	24	5	0	33	409
08:45 AM	83	69	1	0	153	3	37	67	0	107	51	4	34	0	89	4	16	4	0	24	373
Total	362	326	13	0	701	9	172	283	0	464	187	18	159	0	364	14	79	20	0	113	1642
*** BREAK ***																					
04:00 PM	47	82	5	0	134	3	94	59	0	156	108	26	82	0	216	7	10	1	0	18	524
04:15 PM	51	56	4	0	111	7	119	58	0	184	111	25	99	0	235	4	11	3	0	18	548
04:30 PM	57	53	6	0	116	5	95	52	0	152	92	20	119	0	231	3	15	0	0	18	517
04:45 PM	57	50	4	0	111	6	124	55	0	185	78	26	71	0	175	3	13	3	0	19	490
Total	212	241	19	0	472	21	432	224	0	677	389	97	371	0	857	17	49	7	0	73	2079
05:00 PM	53	62	5	0	120	9	105	33	0	147	123	30	111	0	264	11	14	3	0	28	559
05:15 PM	53	72	2	0	127	4	111	50	0	165	151	30	138	0	319	5	20	6	0	31	642
05:30 PM	61	79	1	0	141	8	129	56	0	193	119	36	98	0	253	5	19	2	0	26	613
05:45 PM	57	68	2	0	127	17	126	49	0	192	87	26	94	0	207	7	17	5	0	29	555
Total	224	281	10	0	515	38	471	188	0	697	480	122	441	0	1043	28	70	16	0	114	2369
Grand Total	1175	1222	46	0	2443	75	1313	989	0	2377	1204	251	1116	0	2571	75	305	76	0	456	7847
Apprch %	48.1	50	1.9	0		3.2	55.2	41.6	0		46.8	9.8	43.4	0		16.4	66.9	16.7	0		
Total %	15	15.6	0.6	0	31.1	1	16.7	12.6	0	30.3	15.3	3.2	14.2	0	32.8	1	3.9	1	0	5.8	

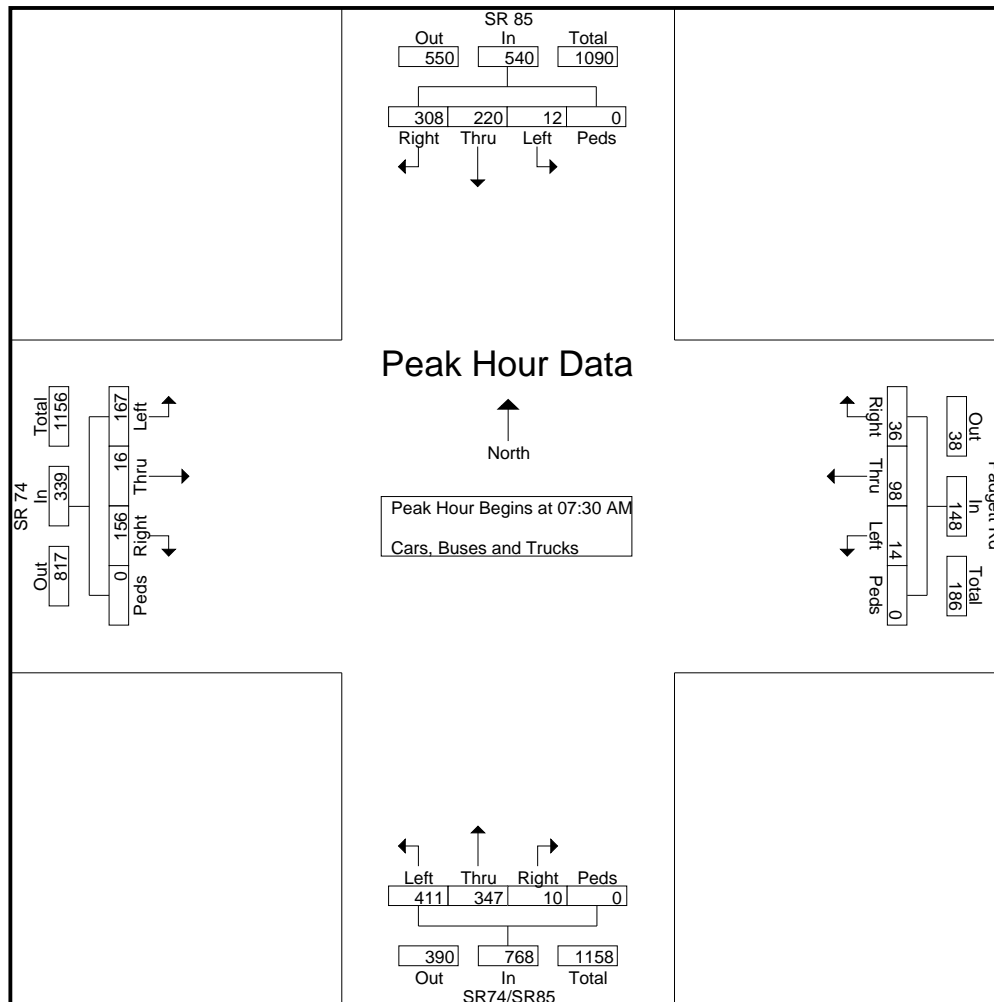
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TMC Data
 SR74/SR85 @ Joel Cowan Pkwy/Padgett Rd
 Senoia, GA
 7-9 AM | 4-6 PM

File Name : 47470002
 Site Code : 47470002
 Start Date : 2/23/2023
 Page No : 2

Start Time	SR74/SR85 Northbound					SR 85 Southbound					SR 74 Eastbound					Padgett Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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	107	105	2	0	214	4	70	79	0	153	34	4	39	0	77	4	29	19	0	52	496
07:45 AM	124	64	2	0	190	2	56	82	0	140	35	5	29	0	69	4	30	6	0	40	439
08:00 AM	86	95	4	0	185	2	48	75	0	125	38	2	46	0	86	2	24	4	0	30	426
08:15 AM	94	83	2	0	179	4	46	72	0	122	60	5	42	0	107	4	15	7	0	26	434
Total Volume	411	347	10	0	768	12	220	308	0	540	167	16	156	0	339	14	98	36	0	148	1795
% App. Total	53.5	45.2					40.7				49.3					66.2	24.3				
PHF	.829	.826	.625	.000	.897	.750	.786	.939	.000	.882	.696	.800	.848	.000	.792	.875	.817	.474	.000	.712	.905



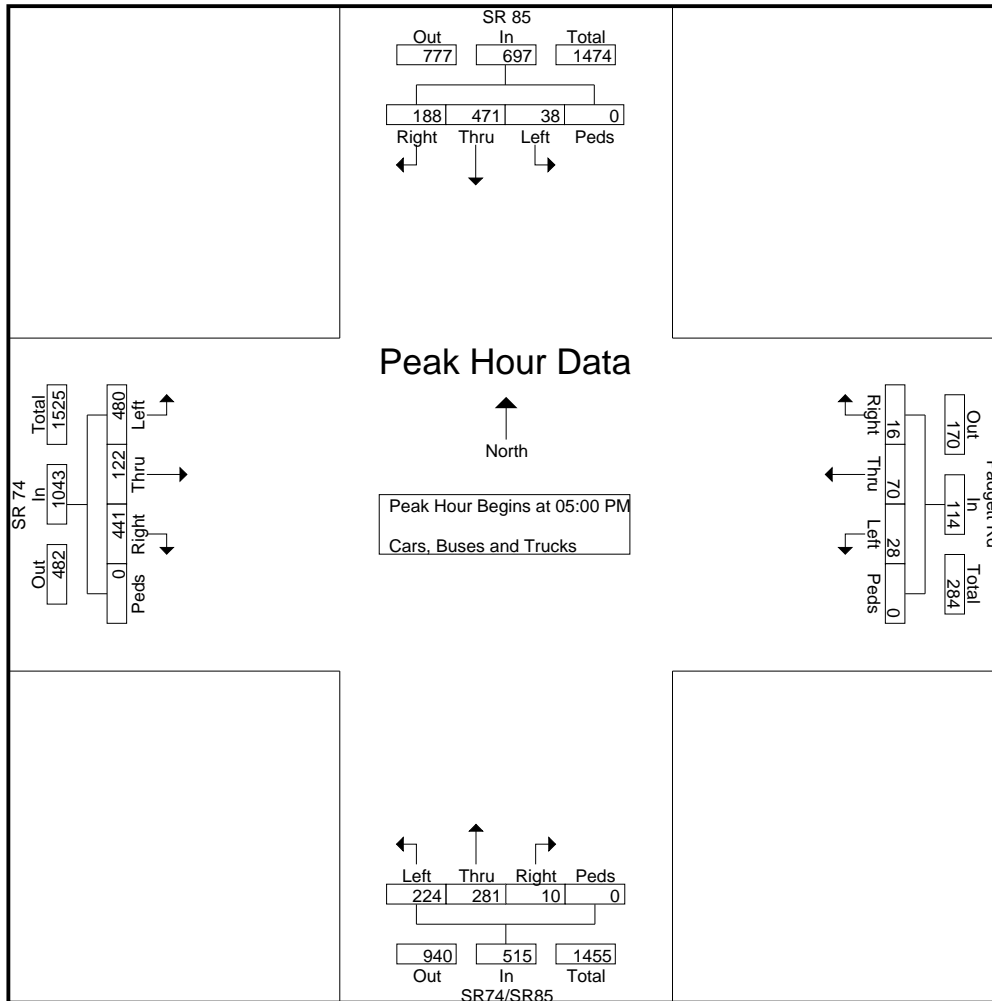
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TMC Data
 SR74/SR85 @ Joel Cowan Pkwy/Padgett Rd
 Senoia, GA
 7-9 AM | 4-6 PM

File Name : 47470002
 Site Code : 47470002
 Start Date : 2/23/2023
 Page No : 3

Start Time	SR74/SR85 Northbound					SR 85 Southbound					SR 74 Eastbound					Padgett Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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	53	62	5	0	120	9	105	33	0	147	123	30	111	0	264	11	14	3	0	28	559
05:15 PM	53	72	2	0	127	4	111	50	0	165	151	30	138	0	319	5	20	6	0	31	642
05:30 PM	61	79	1	0	141	8	129	56	0	193	119	36	98	0	253	5	19	2	0	26	613
05:45 PM	57	68	2	0	127	17	126	49	0	192	87	26	94	0	207	7	17	5	0	29	555
Total Volume	224	281	10	0	515	38	471	188	0	697	480	122	441	0	1043	28	70	16	0	114	2369
% App. Total	43.5	54.6				67.6					11.7	42.3			24.6	61.4					
PHF	.918	.889	.500	.000	.913	.559	.913	.839	.000	.903	.795	.847	.799	.000	.817	.636	.875	.667	.000	.919	.923



Appendix B

Intersection Analysis Methodology

Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2016 edition (HCM 6). Synchro 10 software, which emulates the HCM 6 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and roundabouts and stop-sign controlled (unsignalized) intersections. Levels of service (LOS) are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay.

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

Table A – Level of Service Criteria for Signalized Intersections and Roundabouts

Control Delay (s/veh)	LOS
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

Source: Highway Capacity Manual 6

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

Table B – Level of Service Criteria for Unsignalized Intersections

Control Delay (s/veh)	LOS
0 – 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

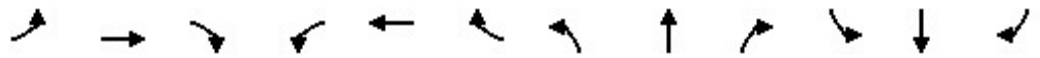
Source: Highway Capacity Manual 6

Appendix C

Existing Intersection Operational Analysis

Forza Manufacturing
1: GA 74/85 & GA 16

existing a.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	249	231	22	29	409	282	91	316	15	108	123	128
Future Volume (veh/h)	249	231	22	29	409	282	91	316	15	108	123	128
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	1752	1752	1752	1752	1752	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	290	269	0	33	470	0	95	329	0	115	131	0
Peak Hour Factor	0.86	0.86	0.86	0.87	0.87	0.87	0.96	0.96	0.96	0.94	0.94	0.94
Percent Heavy Veh, %	10	10	10	10	10	10	11	11	11	11	11	11
Cap, veh/h	351	698		448	517		446	469		300	483	
Arrive On Green	0.14	0.40	0.00	0.03	0.30	0.00	0.06	0.27	0.00	0.07	0.28	0.00
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Grp Volume(v), veh/h	290	269	0	33	470	0	95	329	0	115	131	0
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Q Serve(g_s), s	8.8	8.4	0.0	1.0	20.0	0.0	3.2	13.2	0.0	3.8	4.6	0.0
Cycle Q Clear(g_c), s	8.8	8.4	0.0	1.0	20.0	0.0	3.2	13.2	0.0	3.8	4.6	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	351	698		448	517		446	469		300	483	
V/C Ratio(X)	0.83	0.39		0.07	0.91		0.21	0.70		0.38	0.27	
Avail Cap(c_a), veh/h	351	702		502	578		459	469		300	483	
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(l)	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	17.6	16.5	0.0	17.8	26.2	0.0	18.6	25.4	0.0	19.6	21.8	0.0
Incr Delay (d2), s/veh	14.8	0.3	0.0	0.1	17.3	0.0	0.2	8.5	0.0	0.8	1.4	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	4.1	2.9	0.0	0.4	9.6	0.0	1.1	5.8	0.0	1.3	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	16.9	0.0	17.9	43.5	0.0	18.8	33.8	0.0	20.4	23.2	0.0
LnGrp LOS	C	B		B	D		B	C		C	C	
Approach Vol, veh/h		559	A		503	A		424	A		246	A
Approach Delay, s/veh		24.9			41.8			30.5			21.9	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	25.4	7.0	35.3	9.0	26.0	15.0	27.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	20.9	5.0	31.0	5.1	20.9	10.5	25.5				
Max Q Clear Time (g_c+I1), s	5.8	15.2	3.0	10.4	5.2	6.6	10.8	22.0				
Green Ext Time (p_c), s	0.0	0.8	0.0	1.2	0.0	0.4	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay	30.8
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	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	9	7	751	336	30
Future Vol, veh/h	25	9	7	751	336	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	95	95	95	95
Heavy Vehicles, %	2	2	2	11	11	2
Mvmt Flow	32	12	7	791	354	32

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1159	354	386	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	216	690	1172	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	215	690	1172	-	-	-
Mov Cap-2 Maneuver	215	-	-	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	440	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.9	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1172	-	215	690	-	-
HCM Lane V/C Ratio	0.006	-	0.151	0.017	-	-
HCM Control Delay (s)	8.1	-	24.7	10.3	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	0.1	-	-

Forza Manufacturing

3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

existing a.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	16	156	14	98	36	411	347	10	12	220	308
Future Volume (veh/h)	167	16	156	14	98	36	411	347	10	12	220	308
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	211	20	0	20	138	0	457	386	11	14	250	0
Peak Hour Factor	0.79	0.79	0.79	0.71	0.71	0.71	0.90	0.90	0.90	0.88	0.88	0.88
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	298	490		248	193		684	1055	963	441	593	
Arrive On Green	0.09	0.26	0.00	0.10	0.10	0.00	0.20	0.61	0.61	0.34	0.34	0.00
Sat Flow, veh/h	1668	1870	1485	1392	1870	1585	1668	1737	1585	987	1737	1485
Grp Volume(v), veh/h	211	20	0	20	138	0	457	386	11	14	250	0
Grp Sat Flow(s),veh/h/ln	1668	1870	1485	1392	1870	1585	1668	1737	1585	987	1737	1485
Q Serve(g_s), s	6.5	0.6	0.0	0.9	4.9	0.0	11.2	7.7	0.2	0.7	7.7	0.0
Cycle Q Clear(g_c), s	6.5	0.6	0.0	0.9	4.9	0.0	11.2	7.7	0.2	0.7	7.7	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	298	490		248	193		684	1055	963	441	593	
V/C Ratio(X)	0.71	0.04		0.08	0.72		0.67	0.37	0.01	0.03	0.42	
Avail Cap(c_a), veh/h	298	785		467	487		795	1055	963	441	593	
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(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.2	19.0	0.0	28.2	30.0	0.0	9.9	6.8	5.4	15.2	17.5	0.0
Incr Delay (d2), s/veh	7.5	0.0	0.0	0.1	4.9	0.0	1.7	1.0	0.0	0.1	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.2	0.0	0.3	2.2	0.0	3.0	2.0	0.0	0.1	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	19.1	0.0	28.3	34.9	0.0	11.7	7.8	5.4	15.3	19.7	0.0
LnGrp LOS	C	B		C	C		B	A	A	B	B	
Approach Vol, veh/h		231	A		158	A		854			264	A
Approach Delay, s/veh		31.5			34.1			9.9			19.5	
Approach LOS		C			C			A			B	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		46.5		22.6	18.4	28.1	11.0	11.6				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		42.0		29.0	18.5	19.0	6.5	18.0				
Max Q Clear Time (g_c+I1), s		9.7		2.6	13.2	9.7	8.5	6.9				
Green Ext Time (p_c), s		2.1		0.0	0.7	0.8	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

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

Forza Manufacturing
1: GA 74/85 & GA 16

existing p.m.

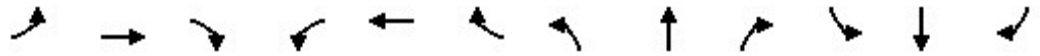
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	388	55	39	437	155	50	180	21	286	322	252
Future Volume (veh/h)	187	388	55	39	437	155	50	180	21	286	322	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1752	1752	1752	1752	1752	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	199	413	0	43	486	0	56	200	0	298	335	0
Peak Hour Factor	0.94	0.94	0.94	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	10	10	10	10	11	11	11	11	11	11
Cap, veh/h	267	614		296	535		335	440		469	575	
Arrive On Green	0.08	0.35	0.00	0.04	0.31	0.00	0.05	0.25	0.00	0.12	0.33	0.00
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Grp Volume(v), veh/h	199	413	0	43	486	0	56	200	0	298	335	0
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Q Serve(g_s), s	6.2	15.4	0.0	1.3	20.5	0.0	1.9	7.5	0.0	9.5	12.3	0.0
Cycle Q Clear(g_c), s	6.2	15.4	0.0	1.3	20.5	0.0	1.9	7.5	0.0	9.5	12.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	614		296	535		335	440		469	575	
V/C Ratio(X)	0.74	0.67		0.15	0.91		0.17	0.45		0.64	0.58	
Avail Cap(c_a), veh/h	267	637		339	603		367	440		469	575	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	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	19.3	21.2	0.0	18.0	25.7	0.0	19.9	24.3	0.0	18.0	21.3	0.0
Incr Delay (d2), s/veh	10.8	2.7	0.0	0.2	16.6	0.0	0.2	3.4	0.0	2.8	4.3	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	2.8	5.8	0.0	0.5	9.8	0.0	0.7	3.1	0.0	3.6	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	23.9	0.0	18.2	42.3	0.0	20.1	27.6	0.0	20.9	25.6	0.0
LnGrp LOS	C	C		B	D		C	C		C	C	
Approach Vol, veh/h		612	A		529	A		256	A		633	A
Approach Delay, s/veh		25.9			40.4			26.0			23.4	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	24.0	7.5	31.5	8.0	30.0	11.0	28.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.5	19.5	5.0	28.0	5.0	24.0	6.5	26.5				
Max Q Clear Time (g_c+I1), s	11.5	9.5	3.3	17.4	3.9	14.3	8.2	22.5				
Green Ext Time (p_c), s	0.0	0.6	0.0	1.6	0.0	1.1	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			28.9									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	13	7	457	850	75
Future Vol, veh/h	42	13	7	457	850	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	94	94	95	95
Heavy Vehicles, %	2	2	2	11	11	2
Mvmt Flow	46	14	7	486	895	79
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1395	895	974	0	0	
Stage 1	895	-	-	-	-	
Stage 2	500	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	156	339	708	-	-	
Stage 1	399	-	-	-	-	
Stage 2	609	-	-	-	-	
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	154	339	708	-	-	
Mov Cap-2 Maneuver	154	-	-	-	-	
Stage 1	395	-	-	-	-	
Stage 2	609	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	32.7	0.2	0			
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	708	-	154	339	-	-
HCM Lane V/C Ratio	0.011	-	0.296	0.042	-	-
HCM Control Delay (s)	10.1	-	37.9	16.1	-	-
HCM Lane LOS	B	-	E	C	-	-
HCM 95th %tile Q(veh)	0	-	1.2	0.1	-	-

Forza Manufacturing

3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

existing p.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	122	441	28	70	16	224	281	10	38	471	188
Future Volume (veh/h)	480	122	441	28	70	16	224	281	10	38	471	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	585	149	0	30	76	0	246	309	11	42	523	0
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.90
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	589	751		163	122		308	861	786	431	572	
Arrive On Green	0.29	0.40	0.00	0.07	0.07	0.00	0.12	0.50	0.50	0.33	0.33	0.00
Sat Flow, veh/h	1668	1870	1485	1239	1870	1585	1668	1737	1585	1060	1737	1485
Grp Volume(v), veh/h	585	149	0	30	76	0	246	309	11	42	523	0
Grp Sat Flow(s),veh/h/ln	1668	1870	1485	1239	1870	1585	1668	1737	1585	1060	1737	1485
Q Serve(g_s), s	25.0	4.5	0.0	2.0	3.5	0.0	8.1	9.6	0.3	2.4	25.3	0.0
Cycle Q Clear(g_c), s	25.0	4.5	0.0	2.0	3.5	0.0	8.1	9.6	0.3	2.4	25.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	589	751		163	122		308	861	786	431	572	
V/C Ratio(X)	0.99	0.20		0.18	0.62		0.80	0.36	0.01	0.10	0.91	
Avail Cap(c_a), veh/h	589	1013		336	384		319	861	786	431	572	
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(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.4	17.1	0.0	39.3	40.0	0.0	19.8	13.6	11.2	20.5	28.2	0.0
Incr Delay (d2), s/veh	35.1	0.1	0.0	0.5	5.1	0.0	13.1	1.2	0.0	0.4	21.5	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	15.9	1.7	0.0	0.6	1.7	0.0	3.7	3.4	0.1	0.6	12.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	17.2	0.0	39.8	45.1	0.0	32.9	14.7	11.3	21.0	49.7	0.0
LnGrp LOS	E	B		D	D		C	B	B	C	D	
Approach Vol, veh/h		734	A		106	A		566			565	A
Approach Delay, s/veh		53.3			43.6			22.5			47.6	
Approach LOS		D			D			C			D	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		48.0		39.7	14.6	33.4	29.5	10.2				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		43.5		47.5	10.7	28.3	25.0	18.0				
Max Q Clear Time (g_c+I1), s		11.6		6.5	10.1	27.3	27.0	5.5				
Green Ext Time (p_c), s		1.6		0.7	0.0	0.3	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

Notes

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

Appendix D

No-Build Intersection Operational Analysis

Forza Manufacturing
1: GA 74/85 & GA 16

no-build a.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	315	287	33	32	474	315	109	354	17	129	147	177
Future Volume (veh/h)	315	287	33	32	474	315	109	354	17	129	147	177
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	1752	1752	1752	1752	1752	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	358	326	0	36	527	0	112	365	0	136	155	0
Peak Hour Factor	0.88	0.88	0.88	0.90	0.90	0.90	0.97	0.97	0.97	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	11	11	11	11	11	11
Cap, veh/h	388	801		449	556		383	436		224	417	
Arrive On Green	0.17	0.46	0.00	0.03	0.32	0.00	0.07	0.25	0.00	0.06	0.24	0.00
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Grp Volume(v), veh/h	358	326	0	36	527	0	112	365	0	136	155	0
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Q Serve(g_s), s	13.3	11.1	0.0	1.3	26.2	0.0	4.5	17.8	0.0	5.1	6.6	0.0
Cycle Q Clear(g_c), s	13.3	11.1	0.0	1.3	26.2	0.0	4.5	17.8	0.0	5.1	6.6	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	388	801		449	556		383	436		224	417	
V/C Ratio(X)	0.92	0.41		0.08	0.95		0.29	0.84		0.61	0.37	
Avail Cap(c_a), veh/h	397	801		488	561		394	436		224	417	
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(l)	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	22.0	16.2	0.0	19.2	29.7	0.0	23.2	31.7	0.0	27.2	28.3	0.0
Incr Delay (d2), s/veh	26.4	0.3	0.0	0.1	25.4	0.0	0.4	17.2	0.0	4.6	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	3.9	0.0	0.5	13.7	0.0	1.6	8.8	0.0	2.3	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	16.5	0.0	19.3	55.2	0.0	23.6	48.9	0.0	31.8	30.8	0.0
LnGrp LOS	D	B		B	E		C	D		C	C	
Approach Vol, veh/h		684	A		563	A		477	A		291	A
Approach Delay, s/veh		33.2			52.9			43.0			31.3	
Approach LOS		C			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	26.9	7.5	45.3	10.6	25.9	19.9	32.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	22.4	5.0	39.5	6.7	20.8	15.9	28.6				
Max Q Clear Time (g_c+I1), s	7.1	19.8	3.3	13.1	6.5	8.6	15.3	28.2				
Green Ext Time (p_c), s	0.0	0.5	0.0	1.6	0.0	0.5	0.1	0.1				

Intersection Summary

HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D

Notes

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

Intersection						
Int Delay, s/veh	7.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	113	42	20	866	396	62
Future Vol, veh/h	113	42	20	866	396	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	97	97	97	97
Heavy Vehicles, %	2	2	2	11	11	2
Mvmt Flow	133	49	21	893	408	64

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1343	408	472	0	-	0
Stage 1	408	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	168	643	1090	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	165	643	1090	-	-	-
Mov Cap-2 Maneuver	165	-	-	-	-	-
Stage 1	658	-	-	-	-	-
Stage 2	382	-	-	-	-	-

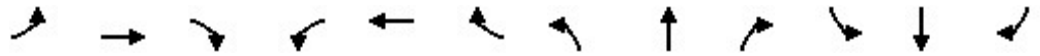
Approach	EB	NB	SB
HCM Control Delay, s	62.9	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1090	-	165	643	-	-
HCM Lane V/C Ratio	0.019	-	0.806	0.077	-	-
HCM Control Delay (s)	8.4	-	82.2	11.1	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	5.3	0.2	-	-

Forza Manufacturing

3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

no-build a.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Volume (veh/h)	184	18	192	21	108	40	518	434	18	13	271	340
Future Volume (veh/h)	184	18	192	21	108	40	518	434	18	13	271	340
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	227	22	0	29	150	0	563	472	20	14	301	0
Peak Hour Factor	0.81	0.81	0.81	0.72	0.72	0.72	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	262	460		238	200		700	1116	1018	405	607	
Arrive On Green	0.08	0.25	0.00	0.11	0.11	0.00	0.24	0.64	0.64	0.35	0.35	0.00
Sat Flow, veh/h	1668	1870	1485	1390	1870	1585	1668	1737	1585	905	1737	1485
Grp Volume(v), veh/h	227	22	0	29	150	0	563	472	20	14	301	0
Grp Sat Flow(s),veh/h/ln	1668	1870	1485	1390	1870	1585	1668	1737	1585	905	1737	1485
Q Serve(g_s), s	6.7	0.7	0.0	1.5	6.3	0.0	16.0	10.8	0.4	0.8	11.0	0.0
Cycle Q Clear(g_c), s	6.7	0.7	0.0	1.5	6.3	0.0	16.0	10.8	0.4	0.8	11.0	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	262	460		238	200		700	1116	1018	405	607	
V/C Ratio(X)	0.87	0.05		0.12	0.75		0.80	0.42	0.02	0.03	0.50	
Avail Cap(c_a), veh/h	262	677		399	418		832	1116	1018	405	607	
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	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.6	23.2	0.0	32.8	34.9	0.0	11.6	7.1	5.2	17.3	20.7	0.0
Incr Delay (d2), s/veh	25.0	0.0	0.0	0.2	5.5	0.0	4.9	1.2	0.0	0.2	2.9	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	2.9	0.3	0.0	0.5	2.9	0.0	4.9	3.0	0.1	0.2	4.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.6	23.2	0.0	33.1	40.5	0.0	16.5	8.3	5.3	17.5	23.5	0.0
LnGrp LOS	E	C		C	D		B	A	A	B	C	
Approach Vol, veh/h		249	A		179	A		1055			315	A
Approach Delay, s/veh		53.7			39.3			12.6			23.3	
Approach LOS		D			D			B			C	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		56.3		24.3	23.6	32.7	11.2	13.1				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		51.8		29.2	25.5	21.8	6.7	18.0				
Max Q Clear Time (g_c+I1), s		12.8		2.7	18.0	13.0	8.7	8.3				
Green Ext Time (p_c), s		2.8		0.0	1.2	1.0	0.0	0.5				

Intersection Summary

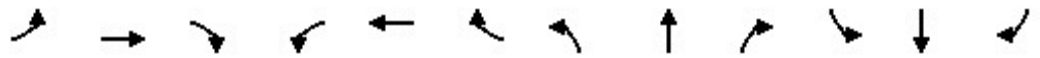
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

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

Forza Manufacturing
1: GA 74/85 & GA 16

no-build p.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	478	83	43	540	182	78	211	23	322	363	352
Future Volume (veh/h)	278	478	83	43	540	182	78	211	23	322	363	352
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	1752	1752	1752	1752	1752	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	290	498	0	46	581	0	85	229	0	329	370	0
Peak Hour Factor	0.96	0.96	0.96	0.93	0.93	0.93	0.92	0.92	0.92	0.98	0.98	0.98
Percent Heavy Veh, %	10	10	10	10	10	10	11	11	11	11	11	11
Cap, veh/h	302	757		319	616		242	362		372	473	
Arrive On Green	0.12	0.43	0.00	0.04	0.35	0.00	0.05	0.21	0.00	0.12	0.27	0.00
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Grp Volume(v), veh/h	290	498	0	46	581	0	85	229	0	329	370	0
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Q Serve(g_s), s	9.7	20.0	0.0	1.5	28.5	0.0	3.5	10.7	0.0	10.5	17.5	0.0
Cycle Q Clear(g_c), s	9.7	20.0	0.0	1.5	28.5	0.0	3.5	10.7	0.0	10.5	17.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	302	757		319	616		242	362		372	473	
V/C Ratio(X)	0.96	0.66		0.14	0.94		0.35	0.63		0.89	0.78	
Avail Cap(c_a), veh/h	302	757		358	642		245	362		372	473	
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	20.7	20.0	0.0	18.0	27.9	0.0	26.2	32.0	0.0	27.9	29.9	0.0
Incr Delay (d2), s/veh	40.9	2.1	0.0	0.2	22.1	0.0	0.9	8.1	0.0	21.7	12.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	7.4	0.0	0.5	14.2	0.0	1.3	4.9	0.0	4.0	8.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	22.1	0.0	18.2	50.0	0.0	27.1	40.1	0.0	49.5	42.0	0.0
LnGrp LOS	E	C		B	D		C	D		D	D	
Approach Vol, veh/h		788	A		627	A		314	A		699	A
Approach Delay, s/veh		36.6			47.6			36.6			45.6	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	23.0	7.9	42.8	9.4	28.6	15.0	35.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	18.5	5.5	37.5	5.0	24.0	10.5	32.5				
Max Q Clear Time (g_c+I1), s	12.5	12.7	3.5	22.0	5.5	19.5	11.7	30.5				
Green Ext Time (p_c), s	0.0	0.5	0.0	2.4	0.0	0.8	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	42.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	9.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	101	34	43	454	1006	175
Future Vol, veh/h	101	34	43	454	1006	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	96	96	98	98
Heavy Vehicles, %	2	2	2	11	11	2
Mvmt Flow	106	36	45	473	1027	179

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1590	1027	1206	0	-	0
Stage 1	1027	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	118	285	579	-	-	-
Stage 1	345	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	109	285	579	-	-	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	318	-	-	-	-	-
Stage 2	570	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	119.4	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	579	-	109	285	-	-
HCM Lane V/C Ratio	0.077	-	0.975	0.126	-	-
HCM Control Delay (s)	11.7	-	153	19.4	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	6.1	0.4	-	-

Forza Manufacturing

3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

no-build p.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	135	559	40	77	18	302	362	19	42	599	208
Future Volume (veh/h)	530	135	559	40	77	18	302	362	19	42	599	208
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	624	159	0	43	83	0	325	389	20	45	644	0
Peak Hour Factor	0.85	0.85	0.85	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	529	685		125	112		323	990	903	427	668	
Arrive On Green	0.27	0.37	0.00	0.06	0.06	0.00	0.15	0.57	0.57	0.38	0.38	0.00
Sat Flow, veh/h	1668	1870	1485	1227	1870	1585	1668	1737	1585	977	1737	1485
Grp Volume(v), veh/h	624	159	0	43	83	0	325	389	20	45	644	0
Grp Sat Flow(s),veh/h/ln	1668	1870	1485	1227	1870	1585	1668	1737	1585	977	1737	1485
Q Serve(g_s), s	38.5	8.3	0.0	4.8	6.1	0.0	21.5	17.4	0.8	4.2	50.9	0.0
Cycle Q Clear(g_c), s	38.5	8.3	0.0	4.8	6.1	0.0	21.5	17.4	0.8	4.2	50.9	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	529	685		125	112		323	990	903	427	668	
V/C Ratio(X)	1.18	0.23		0.34	0.74		1.01	0.39	0.02	0.11	0.96	
Avail Cap(c_a), veh/h	529	813		209	240		323	990	903	427	668	
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(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.5	30.8	0.0	64.3	64.9	0.0	44.0	16.7	13.2	27.9	42.3	0.0
Incr Delay (d2), s/veh	99.3	0.2	0.0	1.6	9.2	0.0	51.7	1.2	0.0	0.5	27.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.2	3.6	0.0	1.5	3.1	0.0	10.5	6.7	0.3	1.0	25.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	143.8	31.0	0.0	65.9	74.2	0.0	95.7	17.9	13.2	28.4	69.3	0.0
LnGrp LOS	F	C		E	E		F	B	B	C	E	
Approach Vol, veh/h		783	A		126	A		734			689	A
Approach Delay, s/veh		120.9			71.4			52.2			66.6	
Approach LOS		F			E			D			E	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		84.5		55.9	26.0	58.5	43.0	12.9				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		80.0		61.0	21.5	54.0	38.5	18.0				
Max Q Clear Time (g_c+I1), s		19.4		10.3	23.5	52.9	40.5	8.1				
Green Ext Time (p_c), s		2.2		0.8	0.0	0.5	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	80.6
HCM 6th LOS	F

Notes

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

Forza Manufacturing
2: GA 74/85 & Seavy Street

no-build p.m. with mitigation



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	101	34	43	454	1006	175
Future Volume (veh/h)	101	34	43	454	1006	175
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1737	1737	1870
Adj Flow Rate, veh/h	106	36	45	473	1027	179
Peak Hour Factor	0.95	0.95	0.96	0.96	0.98	0.98
Percent Heavy Veh, %	2	2	2	11	11	2
Cap, veh/h	153	136	265	1339	1140	1040
Arrive On Green	0.09	0.09	0.04	0.77	0.66	0.66
Sat Flow, veh/h	1781	1585	1781	1737	1737	1585
Grp Volume(v), veh/h	106	36	45	473	1027	179
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1737	1737	1585
Q Serve(g_s), s	3.6	1.3	0.4	5.4	31.3	2.8
Cycle Q Clear(g_c), s	3.6	1.3	0.4	5.4	31.3	2.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	153	136	265	1339	1140	1040
V/C Ratio(X)	0.69	0.26	0.17	0.35	0.90	0.17
Avail Cap(c_a), veh/h	510	453	330	1739	1477	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	26.9	12.1	2.3	9.1	4.2
Incr Delay (d2), s/veh	5.5	1.0	0.3	0.2	6.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.3	0.1	7.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.4	27.9	12.4	2.4	15.7	4.3
LnGrp LOS	C	C	B	A	B	A
Approach Vol, veh/h				518	1206	
Approach Delay, s/veh	32.0			3.3	14.0	
Approach LOS	C			A	B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		53.0		9.9	7.2	45.8
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		63.0		18.0	5.0	53.5
Max Q Clear Time (g_c+I1), s		7.4		5.6	2.4	33.3
Green Ext Time (p_c), s		2.7		0.3	0.0	8.0
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			

Forza Manufacturing
 3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

no-build p.m. with mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↖↗	↖	↑	↖	↖	↑	↖	↖	↑	↖
Traffic Volume (veh/h)	530	135	559	40	77	18	302	362	19	42	599	208
Future Volume (veh/h)	530	135	559	40	77	18	302	362	19	42	599	208
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	624	159	0	43	83	0	325	389	20	45	644	0
Peak Hour Factor	0.85	0.85	0.85	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	676	590		146	123		357	1047	956	481	740	
Arrive On Green	0.21	0.32	0.00	0.07	0.07	0.00	0.14	0.60	0.60	0.43	0.43	0.00
Sat Flow, veh/h	3237	1870	2613	1227	1870	1585	1668	1737	1585	977	1737	1485
Grp Volume(v), veh/h	624	159	0	43	83	0	325	389	20	45	644	0
Grp Sat Flow(s),veh/h/ln	1618	1870	1306	1227	1870	1585	1668	1737	1585	977	1737	1485
Q Serve(g_s), s	20.8	7.0	0.0	3.7	4.8	0.0	12.4	12.6	0.6	3.1	37.3	0.0
Cycle Q Clear(g_c), s	20.8	7.0	0.0	3.7	4.8	0.0	12.4	12.6	0.6	3.1	37.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	676	590		146	123		357	1047	956	481	740	
V/C Ratio(X)	0.92	0.27		0.29	0.67		0.91	0.37	0.02	0.09	0.87	
Avail Cap(c_a), veh/h	690	1094		471	619		458	1047	956	481	740	
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	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.8	28.2	0.0	49.9	50.4	0.0	24.6	11.2	8.8	19.0	28.8	0.0
Incr Delay (d2), s/veh	17.9	0.2	0.0	1.1	6.3	0.0	19.1	1.0	0.0	0.4	13.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	3.0	0.0	1.1	2.4	0.0	6.0	4.4	0.2	0.7	16.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	28.5	0.0	51.0	56.6	0.0	43.7	12.2	8.8	19.4	42.1	0.0
LnGrp LOS	E	C		D	E		D	B	A	B	D	
Approach Vol, veh/h		783	A		126	A		734			689	A
Approach Delay, s/veh		54.1			54.7			26.1			40.6	
Approach LOS		D			D			C			D	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		71.0		39.3	19.5	51.5	27.5	11.8				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		66.5		64.5	21.7	40.3	23.5	36.5				
Max Q Clear Time (g_c+I1), s		14.6		9.0	14.4	39.3	22.8	6.8				
Green Ext Time (p_c), s		2.2		0.8	0.6	0.4	0.2	0.5				

Intersection Summary

HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D

Notes

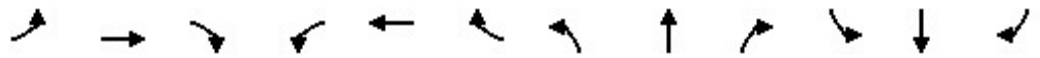
Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix E

Future Intersection Operational Analysis

Forza Manufacturing
1: GA 74/85 & GA 16

future a.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	287	33	32	474	328	109	367	17	133	151	185
Future Volume (veh/h)	341	287	33	32	474	328	109	367	17	133	151	185
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	1752	1752	1752	1752	1752	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	388	326	0	36	527	0	112	378	0	140	159	0
Peak Hour Factor	0.88	0.88	0.88	0.90	0.90	0.90	0.97	0.97	0.97	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	11	11	11	11	11	11
Cap, veh/h	412	826		447	554		364	415		199	394	
Arrive On Green	0.19	0.47	0.00	0.03	0.32	0.00	0.07	0.24	0.00	0.06	0.23	0.00
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Grp Volume(v), veh/h	388	326	0	36	527	0	112	378	0	140	159	0
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Q Serve(g_s), s	15.2	10.9	0.0	1.3	26.5	0.0	4.6	19.0	0.0	5.1	7.0	0.0
Cycle Q Clear(g_c), s	15.2	10.9	0.0	1.3	26.5	0.0	4.6	19.0	0.0	5.1	7.0	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	412	826		447	554		364	415		199	394	
V/C Ratio(X)	0.94	0.39		0.08	0.95		0.31	0.91		0.70	0.40	
Avail Cap(c_a), veh/h	412	826		485	555		375	415		199	394	
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(l)	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	23.1	15.4	0.0	19.5	30.1	0.0	24.2	33.3	0.0	29.4	29.6	0.0
Incr Delay (d2), s/veh	30.1	0.3	0.0	0.1	26.3	0.0	0.5	26.6	0.0	10.6	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	3.7	0.0	0.5	13.9	0.0	1.7	10.3	0.0	2.7	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.2	15.8	0.0	19.5	56.4	0.0	24.7	59.9	0.0	40.0	32.7	0.0
LnGrp LOS	D	B		B	E		C	E		D	C	
Approach Vol, veh/h		714	A		563	A		490	A		299	A
Approach Delay, s/veh		36.1			54.0			51.9			36.1	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	26.0	7.5	46.9	10.7	24.9	21.4	33.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	21.5	5.0	40.4	6.8	19.8	16.9	28.5				
Max Q Clear Time (g_c+I1), s	7.1	21.0	3.3	12.9	6.6	9.0	17.2	28.5				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.6	0.0	0.5	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Notes

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

Forza Manufacturing
2: GA 74/85 & Seavy Street/Forza access

future a.m.

Intersection												
Int Delay, s/veh	48.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↕	↕	↗	↕	↕	↗
Traffic Vol, veh/h	113	19	42	16	6	19	20	866	52	59	396	62
Future Vol, veh/h	113	19	42	16	6	19	20	866	52	59	396	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	0	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	80	80	80	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	3	2	3	2	11	3	3	11	2
Mvmt Flow	133	22	49	20	8	24	21	893	54	61	408	64

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1508	1519	408	1533	1529	893	472	0	0	947	0	0
Stage 1	530	530	-	935	935	-	-	-	-	-	-	-
Stage 2	978	989	-	598	594	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.52	6.23	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.018	3.327	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	~ 99	119	643	95	117	339	1090	-	-	721	-	-
Stage 1	533	527	-	317	344	-	-	-	-	-	-	-
Stage 2	301	325	-	487	493	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 80	107	643	68	105	339	1090	-	-	721	-	-
Mov Cap-2 Maneuver	~ 80	107	-	68	105	-	-	-	-	-	-	-
Stage 1	523	482	-	311	337	-	-	-	-	-	-	-
Stage 2	268	319	-	392	451	-	-	-	-	-	-	-

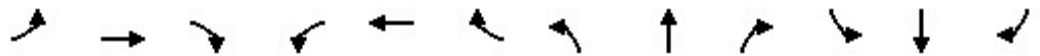
Approach	EB		WB		NB		SB	
HCM Control Delay, s	395.7		49.7		0.2		1.2	
HCM LOS	F		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1090	-	-	83	643	75	339	721	-	-
HCM Lane V/C Ratio	0.019	-	-	1.871	0.077	0.367	0.07	0.084	-	-
HCM Control Delay (s)	8.4	-	-	\$ 518.1	11.1	78.5	16.4	10.5	-	-
HCM Lane LOS	A	-	-	F	B	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	13.4	0.2	1.4	0.2	0.3	-	-

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

Forza Manufacturing
3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

future a.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	18	224	28	108	40	529	440	20	13	291	340
Future Volume (veh/h)	184	18	224	28	108	40	529	440	20	13	291	340
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	227	22	0	39	150	0	575	478	22	14	323	0
Peak Hour Factor	0.81	0.81	0.81	0.72	0.72	0.72	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	310	514		239	201		658	1066	973	359	522	
Arrive On Green	0.11	0.27	0.00	0.11	0.11	0.00	0.26	0.61	0.61	0.30	0.30	0.00
Sat Flow, veh/h	1668	1870	1485	1390	1870	1585	1668	1737	1585	898	1737	1485
Grp Volume(v), veh/h	227	22	0	39	150	0	575	478	22	14	323	0
Grp Sat Flow(s),veh/h/ln	1668	1870	1485	1390	1870	1585	1668	1737	1585	898	1737	1485
Q Serve(g_s), s	9.0	0.7	0.0	2.1	6.3	0.0	17.7	11.8	0.4	0.9	12.9	0.0
Cycle Q Clear(g_c), s	9.0	0.7	0.0	2.1	6.3	0.0	17.7	11.8	0.4	0.9	12.9	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	310	514		239	201		658	1066	973	359	522	
V/C Ratio(X)	0.73	0.04		0.16	0.75		0.87	0.45	0.02	0.04	0.62	
Avail Cap(c_a), veh/h	310	730		399	417		756	1066	973	359	522	
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(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.7	21.5	0.0	33.1	34.9	0.0	13.6	8.3	6.1	20.0	24.2	0.0
Incr Delay (d2), s/veh	8.6	0.0	0.0	0.3	5.4	0.0	10.1	1.4	0.0	0.2	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	4.1	0.3	0.0	0.7	2.9	0.0	6.5	3.5	0.1	0.2	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	21.5	0.0	33.4	40.3	0.0	23.7	9.7	6.2	20.2	29.7	0.0
LnGrp LOS	D	C		C	D		C	A	A	C	C	
Approach Vol, veh/h		249	A		189	A		1075			337	A
Approach Delay, s/veh		35.0			38.9			17.1			29.3	
Approach LOS		D			D			B			C	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		54.0		26.7	25.2	28.8	13.5	13.2				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		49.5		31.5	25.5	19.5	9.0	18.0				
Max Q Clear Time (g_c+I1), s		13.8		2.7	19.7	14.9	11.0	8.3				
Green Ext Time (p_c), s		2.8		0.1	1.0	0.7	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

Notes

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

Forza Manufacturing
1: GA 74/85 & GA 16

future p.m.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	478	83	43	540	189	78	218	23	337	378	381
Future Volume (veh/h)	291	478	83	43	540	189	78	218	23	337	378	381
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	1752	1752	1752	1752	1752	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	303	498	0	46	581	0	85	237	0	344	386	0
Peak Hour Factor	0.96	0.96	0.96	0.93	0.93	0.93	0.92	0.92	0.92	0.98	0.98	0.98
Percent Heavy Veh, %	10	10	10	10	10	10	11	11	11	11	11	11
Cap, veh/h	320	786		327	611		228	325		377	491	
Arrive On Green	0.14	0.45	0.00	0.04	0.35	0.00	0.05	0.19	0.00	0.15	0.28	0.00
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Grp Volume(v), veh/h	303	498	0	46	581	0	85	237	0	344	386	0
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1654	1737	1472	1654	1737	1472
Q Serve(g_s), s	12.3	21.7	0.0	1.7	32.0	0.0	4.1	12.7	0.0	14.5	20.3	0.0
Cycle Q Clear(g_c), s	12.3	21.7	0.0	1.7	32.0	0.0	4.1	12.7	0.0	14.5	20.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	786		327	611		228	325		377	491	
V/C Ratio(X)	0.95	0.63		0.14	0.95		0.37	0.73		0.91	0.79	
Avail Cap(c_a), veh/h	320	786		372	628		228	325		377	491	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.3	21.0	0.0	20.0	31.4	0.0	31.0	37.9	0.0	29.5	32.7	0.0
Incr Delay (d2), s/veh	36.4	1.7	0.0	0.2	24.2	0.0	1.0	13.5	0.0	26.0	12.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.1	0.0	0.6	16.2	0.0	1.6	6.3	0.0	8.7	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	22.7	0.0	20.2	55.6	0.0	32.0	51.4	0.0	55.4	44.7	0.0
LnGrp LOS	E	C		C	E		C	D		E	D	
Approach Vol, veh/h		801	A		627	A		322	A		730	A
Approach Delay, s/veh		37.5			53.0			46.3			49.8	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	23.0	8.1	48.9	9.5	32.5	18.0	39.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.5	18.5	6.3	42.7	5.0	28.0	13.5	35.5				
Max Q Clear Time (g_c+I1), s	16.5	14.7	3.7	23.7	6.1	22.3	14.3	34.0				
Green Ext Time (p_c), s	0.0	0.4	0.0	2.5	0.0	1.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			46.2									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Forza Manufacturing
2: GA 74/85 & Seavy Street/Forza access

future p.m.

Intersection												
Int Delay, s/veh	99.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕	↗	↖	↕	↗
Traffic Vol, veh/h	101	10	34	59	22	66	43	565	27	29	1006	175
Future Vol, veh/h	101	10	34	59	22	66	43	565	27	29	1006	175
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	0	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	92	92	92	96	96	96	98	98	98
Heavy Vehicles, %	2	2	2	3	2	3	2	11	3	3	11	2
Mvmt Flow	106	11	36	64	24	72	45	589	28	30	1027	179

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1828	1794	1027	1879	1945	589	1206	0	0	617	0	0
Stage 1	1087	1087	-	679	679	-	-	-	-	-	-	-
Stage 2	741	707	-	1200	1266	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.52	6.23	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.018	3.327	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	~ 59	80	285	~ 54	65	506	579	-	-	958	-	-
Stage 1	262	292	-	440	451	-	-	-	-	-	-	-
Stage 2	408	438	-	225	240	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 32	71	285	~ 39	58	506	579	-	-	958	-	-
Mov Cap-2 Maneuver	~ 32	71	-	~ 39	58	-	-	-	-	-	-	-
Stage 1	242	283	-	406	416	-	-	-	-	-	-	-
Stage 2	304	404	-	183	233	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, \$	1030.7		\$ 385.5		0.8			0.2		
HCM LOS	F		F							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	579	-	-	34	285	43	506	958	-	-
HCM Lane V/C Ratio	0.077	-	-	3.437	0.126	2.048	0.142	0.031	-	-
HCM Control Delay (s)	11.7	-	-	\$ 1340.5	19.4	\$ 688.7	13.3	8.9	-	-
HCM Lane LOS	B	-	-	F	C	F	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	13.6	0.4	9.2	0.5	0.1	-	-

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

Forza Manufacturing
 3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

future p.m.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	135	575	43	77	18	339	384	26	42	609	208
Future Volume (veh/h)	530	135	575	43	77	18	339	384	26	42	609	208
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	624	159	0	46	83	0	365	413	28	45	655	0
Peak Hour Factor	0.85	0.85	0.85	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	494	647		131	114		340	1016	927	420	668	
Arrive On Green	0.25	0.35	0.00	0.06	0.06	0.00	0.17	0.58	0.58	0.38	0.38	0.00
Sat Flow, veh/h	1668	1870	1485	1227	1870	1585	1668	1737	1585	948	1737	1485
Grp Volume(v), veh/h	624	159	0	46	83	0	365	413	28	45	655	0
Grp Sat Flow(s),veh/h/ln	1668	1870	1485	1227	1870	1585	1668	1737	1585	948	1737	1485
Q Serve(g_s), s	32.5	7.9	0.0	4.8	5.7	0.0	21.5	16.8	1.0	4.0	48.4	0.0
Cycle Q Clear(g_c), s	32.5	7.9	0.0	4.8	5.7	0.0	21.5	16.8	1.0	4.0	48.4	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	494	647		131	114		340	1016	927	420	668	
V/C Ratio(X)	1.26	0.25		0.35	0.73		1.07	0.41	0.03	0.11	0.98	
Avail Cap(c_a), veh/h	494	792		225	259		340	1016	927	420	668	
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	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.8	30.4	0.0	59.5	59.9	0.0	41.5	14.7	11.4	25.8	39.5	0.0
Incr Delay (d2), s/veh	133.5	0.2	0.0	1.6	8.4	0.0	69.3	1.2	0.1	0.5	30.3	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	32.6	3.4	0.0	1.5	2.9	0.0	12.3	6.3	0.3	0.9	24.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	176.3	30.6	0.0	61.1	68.3	0.0	110.8	15.9	11.5	26.3	69.8	0.0
LnGrp LOS	F	C		E	E		F	B	B	C	E	
Approach Vol, veh/h		783	A		129	A		806			700	A
Approach Delay, s/veh		146.7			65.7			58.7			67.0	
Approach LOS		F			E			E			E	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		80.5		49.5	26.0	54.5	37.0	12.5				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		76.0		55.0	21.5	50.0	32.5	18.0				
Max Q Clear Time (g_c+I1), s		18.8		9.9	23.5	50.4	34.5	7.7				
Green Ext Time (p_c), s		2.4		0.8	0.0	0.0	0.0	0.3				

Intersection Summary























HCM 6th Ctrl Delay	90.0
HCM 6th LOS	F

Notes

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

Forza Manufacturing
2: GA 74/85 & Seavy Street/Forza access

future p.m. with mitigation

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	10	34	59	22	66	43	565	27	29	1006	175
Future Volume (veh/h)	101	10	34	59	22	66	43	565	27	29	1006	175
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	1856	1870	1870	1870	1737	1856	1856	1737	1870
Adj Flow Rate, veh/h	106	11	36	64	24	72	45	589	28	30	1027	179
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.96	0.96	0.96	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	2	2	2	11	3	3	11	2
Cap, veh/h	193	33	109	231	33	99	204	1143	1035	509	1130	1031
Arrive On Green	0.05	0.09	0.09	0.04	0.08	0.08	0.04	0.66	0.66	0.03	0.65	0.65
Sat Flow, veh/h	1781	385	1259	1767	412	1236	1781	1737	1572	1767	1737	1585
Grp Volume(v), veh/h	106	0	47	64	0	96	45	589	28	30	1027	179
Grp Sat Flow(s),veh/h/ln	1781	0	1644	1767	0	1648	1781	1737	1572	1767	1737	1585
Q Serve(g_s), s	5.0	0.0	2.6	3.2	0.0	5.6	0.8	17.3	0.6	0.5	49.7	4.4
Cycle Q Clear(g_c), s	5.0	0.0	2.6	3.2	0.0	5.6	0.8	17.3	0.6	0.5	49.7	4.4
Prop In Lane	1.00		0.77	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	0	142	231	0	131	204	1143	1035	509	1130	1031
V/C Ratio(X)	0.55	0.00	0.33	0.28	0.00	0.73	0.22	0.52	0.03	0.06	0.91	0.17
Avail Cap(c_a), veh/h	193	0	301	243	0	301	231	1143	1035	549	1130	1031
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	42.2	39.2	0.0	44.2	18.9	8.7	5.9	6.6	14.7	6.8
Incr Delay (d2), s/veh	3.2	0.0	1.3	0.6	0.0	7.5	0.5	1.7	0.0	0.0	12.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.1	1.4	0.0	2.5	0.5	5.3	0.2	0.2	17.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	0.0	43.6	39.9	0.0	51.8	19.4	10.4	5.9	6.6	26.9	7.1
LnGrp LOS	D	A	D	D	A	D	B	B	A	A	C	A
Approach Vol, veh/h		153			160			662			1236	
Approach Delay, s/veh		43.4			47.0			10.8			23.6	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	69.2	8.8	13.0	8.0	68.5	9.5	12.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	64.0	5.0	18.0	5.0	64.0	5.0	18.0				
Max Q Clear Time (g_c+l1), s	2.5	19.3	5.2	4.6	2.8	51.7	7.0	7.6				
Green Ext Time (p_c), s	0.0	3.7	0.0	0.1	0.0	6.1	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				22.8								
HCM 6th LOS				C								

Forza Manufacturing
 3: GA 74/85/GA 85 & Joel Cowan Parkway/Padgett Road

future p.m. with mitigation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	135	575	43	77	18	339	384	26	42	609	208
Future Volume (veh/h)	530	135	575	43	77	18	339	384	26	42	609	208
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	1870	1752	1870	1870	1870	1752	1737	1870	1870	1737	1752
Adj Flow Rate, veh/h	624	159	0	46	83	0	365	413	28	45	655	0
Peak Hour Factor	0.85	0.85	0.85	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	10	2	10	2	2	2	10	11	2	2	11	10
Cap, veh/h	709	505		172	134		403	1085	990	455	679	
Arrive On Green	0.15	0.27	0.00	0.07	0.07	0.00	0.18	0.62	0.62	0.39	0.39	0.00
Sat Flow, veh/h	3237	1870	2613	1227	1870	1585	1668	1737	1585	948	1737	1485
Grp Volume(v), veh/h	624	159	0	46	83	0	365	413	28	45	655	0
Grp Sat Flow(s),veh/h/ln	1618	1870	1306	1227	1870	1585	1668	1737	1585	948	1737	1485
Q Serve(g_s), s	12.5	5.8	0.0	3.1	3.7	0.0	13.1	10.0	0.6	2.6	31.6	0.0
Cycle Q Clear(g_c), s	12.5	5.8	0.0	3.1	3.7	0.0	13.1	10.0	0.6	2.6	31.6	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	709	505		172	134		403	1085	990	455	679	
V/C Ratio(X)	0.88	0.31		0.27	0.62		0.91	0.38	0.03	0.10	0.96	
Avail Cap(c_a), veh/h	709	1037		521	666		480	1085	990	455	679	
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(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.8	24.9	0.0	38.3	38.6	0.0	22.7	7.9	6.1	16.7	25.5	0.0
Incr Delay (d2), s/veh	12.3	0.4	0.0	0.8	4.6	0.0	18.7	1.0	0.1	0.4	27.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	2.4	0.0	0.9	1.7	0.0	6.3	3.0	0.2	0.5	16.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	25.3	0.0	39.2	43.2	0.0	41.5	8.9	6.2	17.1	52.5	0.0
LnGrp LOS	D	C		D	D		D	A	A	B	D	
Approach Vol, veh/h		783	A		129	A		806			700	A
Approach Delay, s/veh		40.3			41.8			23.6			50.2	
Approach LOS		D			D			C			D	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		58.0		27.6	20.0	38.0	17.0	10.6				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		53.5		47.5	19.5	29.5	12.5	30.5				
Max Q Clear Time (g_c+I1), s		12.0		7.8	15.1	33.6	14.5	5.7				
Green Ext Time (p_c), s		2.4		0.8	0.5	0.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				37.7								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												