FULTON COUNTY

TRAFFIC STUDY

Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

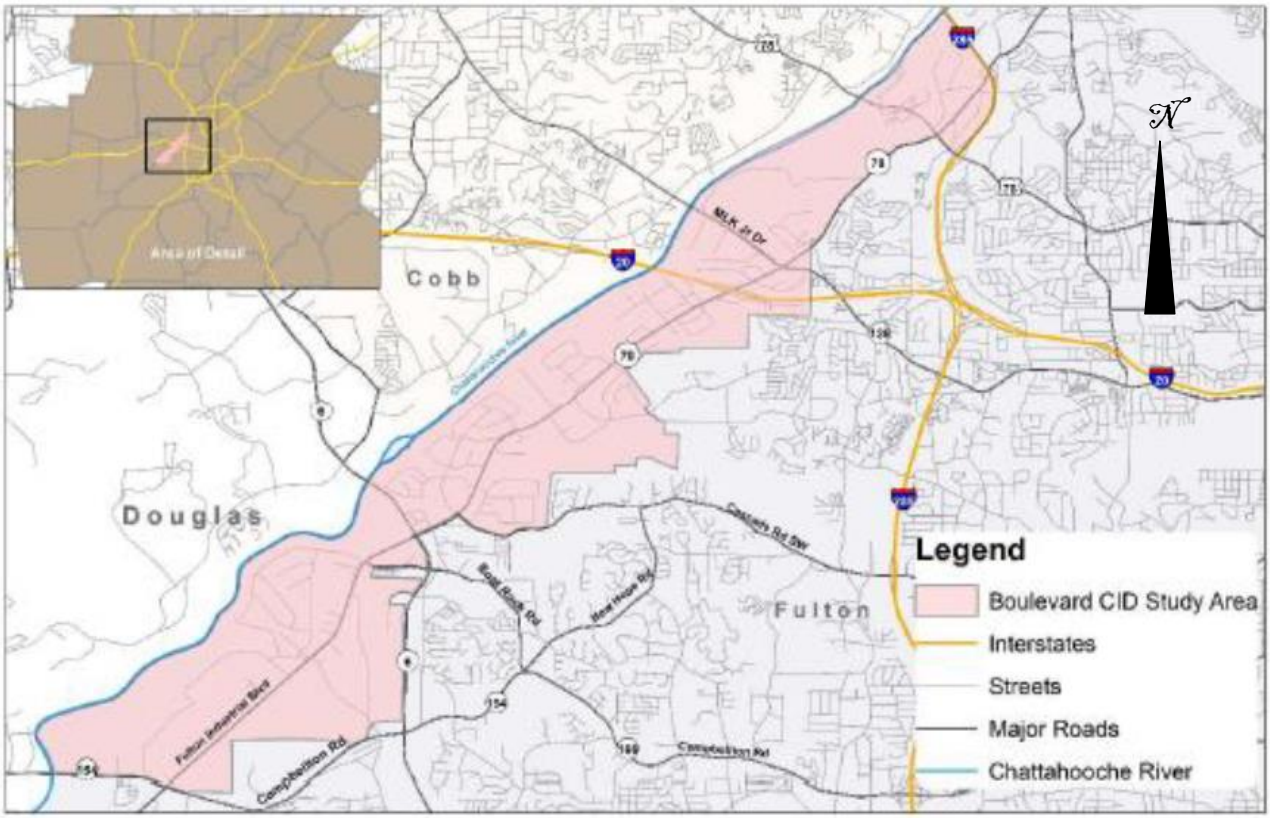

Figure 1: Study Area

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Reason for Investigation

The following document is to report the findings of the Traffic Study requested by WSP USA, Inc. As described in Task Order No.1 between WSP and ATLAS Technical Consultants on November 1, 2020.

Location

The study area is located within unincorporated Fulton County, the City of South Fulton, and the City of Atlanta. The study area was recently changed from unincorporated to municipal property with the City of Atlanta capturing the area north of I-20 and the City of South Fulton capturing the area south of I-20. This transition is on-going at the time of this study. The study area includes property on both sides of Fulton Industrial Boulevard (SR 70) from Campbellton Road (SR 166) in the south to I-285 in the north. The western Border of the study area is made up of the Chattahoochee River (See Figure 1)

Study Area Description

The section of Fulton Industrial Boulevard (SR 70) under study is a 9.85 mile four-lane median-divided minor arterial, that runs SW-NE, from Campbellton Road (SR 166) to Donald Lee Hollowell Parkway (US-78) at its interchange with I-285. Fulton Industrial Boulevard has varying shoulder widths along this corridor, ranging from 2 feet to 10 feet at various sections. Sidewalks are also intermittent along the corridor. Sidewalks, however, are present on most of the north end of the corridor.

Existing Traffic Volumes:

Existing average daily traffic (ADT) volumes and turning movement counts (TMCs) were collected at several locations on Fulton Industrial Boulevard. Due to the high number of locations that needed to be studied, several sources were used to obtain this data. ATLAS conducted manual TMCs for 12 intersections along the corridor as well as three 48-hour pneumatic tube counts at strategic locations, in addition to the five GDOT count stations with historic traffic data. Previous projects and studies were also reviewed in order to obtain counts for 8 other locations, and GDOT's Automatic Traffic Signal Performance Measures (ATSPM) database was also consulted to obtain counts at 9 intersections. Table 1 lists the locations, type of count, and the source of the data.

Table 1: Analyzed Intersections and Source of Turning Movement Counts (TMCs).

Location	Count Type	Source
Fulton Industrial @ SR 166/Cambellton Rd	TMC	2021 Manual Count
Fulton Industrial @ Westgate Pkwy (2 intersections)	TMC	Previous Study
Fulton Industrial Boulevard, South of Riverside Drive	48-hour	GDOT Station 121-0260
Fulton Industrial @ Tradewater Pkwy/Riverside Dr.	TMC	2021 Manual Count
Fulton Industrial Boulevard, North of Riverside Drive	48-Hour	2021 Pneumatic Tube
Fulton Industrial @ Boat Rock Rd.	TMC	ATSPM
Fulton Industrial @ Lakeview Ct.	TMC	2021 Manual Count
Fulton Industrial @ Camp Creek Pkwy	TMC	ATSPM
Fulton Industrial @ Bakers Ferry Road	TMC	Previous Study
Fulton Industrial Boulevard, north of Bakers Ferry Rd.	48-hour	GDOT Station 121-5262
Fulton Industrial @ Great SW Pkwy/Cascade Rd.	TMC	2021 Manual Count
Fulton Industrial Boulevard, north of Cascade Road	48-Hour	2021 Pneumatic Tube

Location	Count Type	Source
Fulton Industrial @ Villanova / Westpark Pl	TMC	2021 Manual Count
Fulton Industrial @ Bucknell	TMC	Previous Study
Fulton Industrial @ Great SW Pkwy/Great SW Pkwy	TMC	ATSPM
Fulton Industrial @ Bakers Ferry Rd	TMC	2021 Manual Count
Fulton Industrial @ Wharton Dr/Mendel Dr.	TMC	2021 Manual Count
Fulton Industrial @ Marvin Miller Dr	TMC	2021 Manual Count
Fulton Industrial Boulevard south of Patton Drive	48-hour	GDOT Station 121-5266
Fulton Industrial @ Patton Drive	TMC	ATSPM
Fulton Industrial @ Commerce Circle (signal)	TMC	2021 Manual Count
Fulton Industrial @ Fulton Industrial Circle	TMC	2021 Manual Count
Fulton Industrial @ Shirley Dr	TMC	2021 Manual Count
Fulton Industrial @ I-20 SB ramps	TMC	Previous Study
Fulton Industrial @ I-20 NB ramps	TMC	Previous Study
Fulton Industrial @ Wendell Dr	TMC	2021 Manual Count
Fulton Industrial Boulevard, north of Wendell Dr.	48-Hour	GDOT Station 121-5268
Fulton Industrial Boulevard, north of Wendell Dr.	48-Hour	2021 Pneumatic Tube
Fulton Industrial @ MLK Jr. Dr.	TMC	ATSPM
Fulton Industrial Boulevard, south of Sandy Creek Rd.	48-hour	GDOT Station 121-5270
Fulton Industrial @ Sandy Creek Rd.	TMC	ATSPM
Fulton Industrial @ UPS north driveway	TMC	ATSPM
Donald Lee Hollowell Pkwy @ Atlanta Ind. Pkwy.	TMC	ATSPM
Fulton Industrial Blvd @ Donald Lee Hollowell (SR 8)	TMC	ATSPM
SR 8 between Fulton Industrial Blvd and Bolton Rd.	48-Hour	GDOT Station 121-5069
SR 8 @ Bolton Rd	TMC	Previous Study
SR 8 @ I-285 SB Ramps	TMC	Previous Study
SR 8 @ I-285 NB Ramps	TMC	Previous Study

Vehicle classification, i.e. cars, buses, single unit trucks, heavy trucks, etc. were also collected as part of the turning movement counts, in order to determine truck percentages for each movement at each of the intersections studied. These individual turning movement truck percentages were carefully incorporated into the capacity analysis of each intersection studied. The raw TMCs that Atlas obtained from its vendor (All Traffic Data) can be found in the Appendix.

The three 48-hour counts that were obtained from its vendor included vehicle classification and were taken in 15-minute intervals, which allowed to obtain peak hour factors. This data was used mostly for the multilane roadway segment analysis of the corridor, also known as roadway capacity analysis. GDOT count station 121-5270 was used for the capacity analysis of one of the four roadway segments. The four roadway segments analyzed will be further discussed in the “Corridor Analysis” section of this report.

The data obtained from GDOT count stations was used mostly to identify the trend of traffic growth and forecast traffic volumes for the future year of 2031.

Corridor Analysis of existing (2021) conditions:

The studied segment of Fulton Industrial Boulevard, was divided into four sections and each was analyzed for the 2021 peak hour conditions (whether they were AM or PM) using the FHWA's Highway Capacity Manual, 2010's methodology for multi-lane roadways. This analysis takes into consideration the number of access points (side-streets and driveways) along each corridor section, the peak hour volume and truck percentages, which were obtained from the 48-hour counts that were collected by ATLAS and by GDOT's mobile count stations, the terrain (level, rolling, mountain, etc), peak hour factor, among other variables.

Volumes for the first three segments were obtained from the 48-hour counts that were performed on the week of May 5th, 2021. These counts included vehicle classification (i.e. truck percentages) as well as peak hour factors. Counts for the fourth roadway segment on Fulton Industrial Boulevard, from I-20 to Donald Lee Holloway, were obtained from GDOT's Traffic Analysis and Data Application (TADA) website. These counts were collected on February 13, 2019 and did not include vehicle classification. A vehicle classification had been performed however, on June 13, 2017, so, the truck percentages were obtained from that count. Peak hour factors were absent from both the 2019 and 2017 counts, so the standard 0.92 peak hour factor was used for that segment, which coincides with the lowest peak hour factor registered along the whole corridor.

The methodology calculates the density of traffic flow along the corridor segment in passenger cars per mile per lane (pc/mi/ln) and assigns a level of service (LOS) value from A to F accordingly, where a LOS A signifies free-flow conditions while a LOS F indicates high levels of congestion. The results of the analysis are shown in Table 2. A full report of the analysis is included in the Appendix.

Table 2: 2021 Multi-Lane Analysis Input Data and LOS – Fulton Industrial Boulevard

		Peak hour volume	Segment length (mi)	Access Points per Mile	Peak hour factor	Truck Percentage	LOS (Density in pc/mi/ln)
FIB from Campbellton Road to Camp Creek Pkwy.	NB	960	3.48	4	0.93	10%	A (10.8)
	SB	1255		5	0.95	10%	B (13.8)
FIB from Camp Creek Pkwy to Wharton Drive SW	NB	1597	2.55	7	0.92	8%	C (21.4)
	SB	1359		7	0.98	9%	B (16.1)
FIB from Wharton Drive SW to I-20	NB	1807	1.32	17	0.93	9%	B (16.1)
	SB	1547		16	0.95	10%	B (13.7)
FIB from I-20 to Donald Lee Hollowell Pkwy.	NB	1121	2.48	11	0.92	21%	B (15.0)
	SB	1287		13	0.92	20%	D (26.4)

The results show that all segments analyzed are currently operating at acceptable levels of service. The worst performing segment is the southbound section of Fulton Industrial Boulevard, between Donald Lee Hollowell Parkway and Interstate I-20, which operates at a LOS D with a density of 26.4 pc/mi/ln. This segment also has the highest truck percentage of the four segments analyzed, which contributes to the higher vehicle density and the higher level of service.

Intersection analysis – Existing Conditions:

Throughout the corridor, 28 intersections were analyzed under existing traffic conditions. This analysis was done to identify, and verify any issues that currently exist. The results of the analysis

are shown in Table 3:

Table 3: LOS and Delay Results Summary for Existing Conditions (2021)

Location	Control Type	AM		PM	
		LOS	Delay (s)	LOS	Delay (s)
Fulton Industrial @ SR 166/Campbellton Rd	Signal	B	17.8	C	28.5
Fulton Industrial @ Westgate Pkwy (S)	Stop	E	38.5	F	526.2
Fulton Industrial @ Westgate Pkwy (N)	Stop	F	374.4	F	810.6
Fulton Industrial @ Tradewater Pkwy/Riverside Dr.	Stop	F	175.3	F	638.2
Fulton Industrial @ Boat Rock Rd.	Signal	C	20.3	C	26.2
Fulton Industrial @ Lakeview Ct.	Signal	A	7.8	A	7.0
Fulton Industrial @ Camp Creek Pkwy	Signal	C	26.6	C	26.3
Fulton Industrial @ Great SW Pkwy/Cascade Rd.	Signal	C	30.6	D	50.3
Fulton Industrial @ Villanova / Westpark Pl	Stop	F	342.7	F	3049.1
Fulton Industrial @ Great SW Pkwy/Great SW Pkwy	Signal	B	15.4	B	12.7
Fulton Industrial @ Bakers Ferry Rd	Signal	B	11.00	B	11.5
Fulton Industrial @ Wharton Dr/Mendel Dr.	Signal	B	10.0	B	14.9
Fulton Industrial @ Marvin Miller Dr	Signal	A	5.2	A	7.3
Fulton Industrial @ Patton Drive	Signal	E	61.3	C	33.2
Fulton Industrial @ Commerce Circle (signal)	Signal	A	6.9	B	16.0
Fulton Industrial @ Fulton Industrial Circle	Stop	A	8.9	A	8.8
Fulton Industrial @ Shirley Dr	Signal	A	4.0	A	4.9
Fulton Industrial @ I-20 SB ramps	Signal	C	31.1	B	18.1
Fulton Industrial @ I-20 NB ramps	Signal	C	21.4	C	20.1
Fulton Industrial @ Wendell Dr	Signal	A	5.0	A	8.2
Fulton Industrial @ MLK Jr. Dr.	Signal	D	40.6	D	49.8
Fulton Industrial @ Aviation Circle/Old Gordon Rd.	Signal	B	12.3	C	22.4
Fulton Industrial @ UPS north driveway	Signal	B	11.7	B	10.5
Donald Lee Hollowell Pkwy @ Atlanta Ind. Pkwy.	Signal	A	5.0	A	5.9
Fulton Industrial Blvd @ Donald Lee Hollowell (SR 8)	Signal	C	24.0	C	23.8
SR 8 @ Bolton Rd	Signal	A	6.8	B	10.6
SR 8 @ I-285 SB Ramps	Signal	B	19.9	B	17.0
SR 8 @ I-285 NB Ramps	Signal	B	16.4	B	19.7

As can be seen from the reported results, the majority of unsignalized intersections that were analyzed presented failing levels of service. In the next paragraphs we will include an intersection-by-intersection analysis of issues found:

Fulton Industrial Boulevard at SR 166/Campbellton Rd

The results of the analysis show that this intersection does not have considerable operational issues during the AM peak hour. However, it was observed that during the PM peak hour the westbound through movement (on Campbellton Road) presents an average delay of 45.5 seconds (LOS D), which generates a 95th percentile queue of 490 feet. This queue may cause difficulty for vehicles exiting the newly built BP gas station on the south-east corner of this intersection, attempting to turn left onto Campbellton Road.

Fulton Industrial Boulevard at Westgate Parkway (South)

The intersection of FIB at Westgate Parkway (South) is currently STOP-sign controlled on Westgate Parkway. During the AM and PM peak hours 59 and 179 vehicles were counted entering FIB from Westgate Parkway. Motorists on Westgate Parkway attempting to turn left onto FIB in the PM experience delays in excess of eight minutes, according to the analysis. This delay is due in part to the number of vehicles attempting to turn left (79) but mostly the southbound volume on FIB (1246). This intersection may be a candidate for signalization.

Fulton Industrial Boulevard at Westgate Parkway (North)

The intersection of FIB at Westgate Parkway (North) is currently STOP-sign controlled on Westgate Parkway. During the AM and PM peak hours 79 and 71 vehicles turn left out of Westgate Parkway onto Fulton Industrial Boulevard, which has a northbound volume of 1450 vehicles in the AM and 1350 vehicles in the southbound direction during the PM. This causes excessive delays for vehicles exiting Westgate Parkway during both peak hours. This intersection may be a candidate for signalization. Since Westgate Parkway (North) and Westgate Parkway (South) connect with each other in a sort of loop, it is likely that only one of the two intersections would need to be signalized. Vehicles on either road would then be drawn toward the signalized intersection which would reduce volumes, and therefore delays at the other location.

Fulton Industrial Boulevard at Tradewater Parkway/Riverside Drive.

The intersection of FIB at Tradewater Parkway/Riverside Drive is STOP-Controlled on both side-streets and has enough traffic volume on both side-streets to warrant a traffic control signal. The analysis of the existing condition shows that the intersection performs at a LOS F during both the AM and PM but performs worse in the PM. This intersection is a candidate for signalization.

Fulton Industrial Boulevard at Villanova Drive / Westpark Place

This intersection is currently STOP-sign controlled and has a LOS F for both side-street approaches in the AM and PM. Volumes on the side streets seem to indicate that a traffic control signal may be warranted for this location.

Fulton Industrial Boulevard at Patton Drive

The intersection of FIB at Patton Drive is currently signalized and shows congestion during the AM peak hour. On FIB in the northbound direction, with 95th percentile queues of over 800 feet and delays of 132.6 seconds for left turners. In the southbound direction, through queues can exceed 500 feet, while left turns experience an average delay of 83.4 seconds. In the westbound direction, 95th percentile queues can reach 780 feet and average delays of 117 seconds. These delays and queues are mostly due to the high volumes on FIB (2432 vehicles in the NB direction).

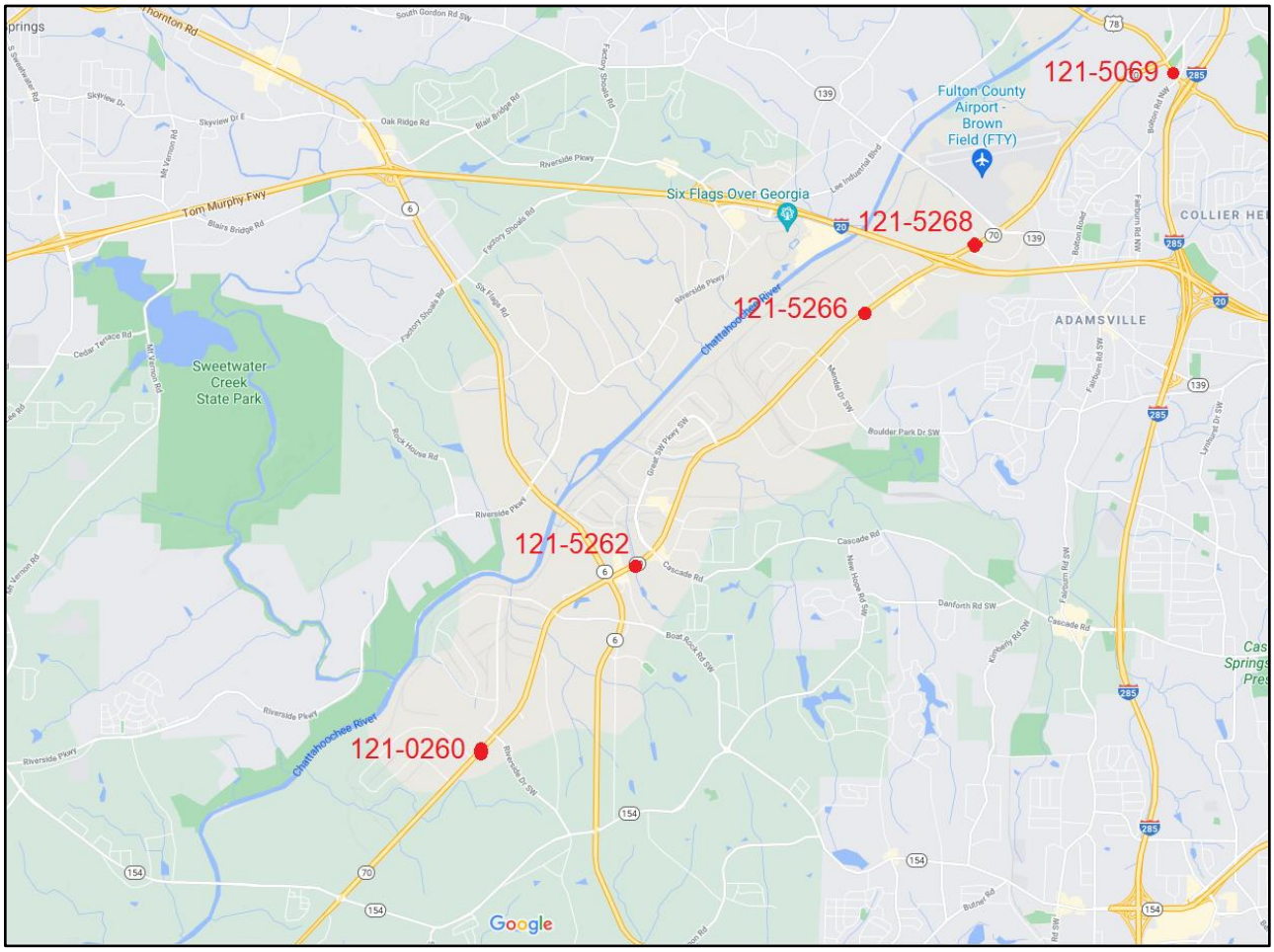
Fulton Industrial Boulevard at MLK Jr. Drive.

Although the intersection of FIB at MLK Jr. Drive has LOS “D” for both AM and PM peak hour, delays of over 60 seconds can be observed in certain turning movements. This is the case for the MLK southbound right-turn movement, which has a LOS E and 95th percentile queue of 765 feet during the AM peak hour.

Traffic Volume Forecasting:

The Georgia Department of Transportation's Traffic Analysis and Data Application (TADA) website presents data collected from the Georgia Traffic Monitoring Program located on the public roads in Georgia. The data recorded by five GDOT traffic count stations on Fulton Industrial Boulevard (SR 70) was collected and used to calculate the annual growth rate for traffic volumes along the corridor. The location of each count station is shown on a map in Figure 2. The calculated growth rate then would be used to predict the Average Annual Daily Traffic (AADT) for the year 2031 for all intersections and roadway segments along the corridor and within the study area.

Figure 2: GDOT Count Stations Used for Traffic Forecasting



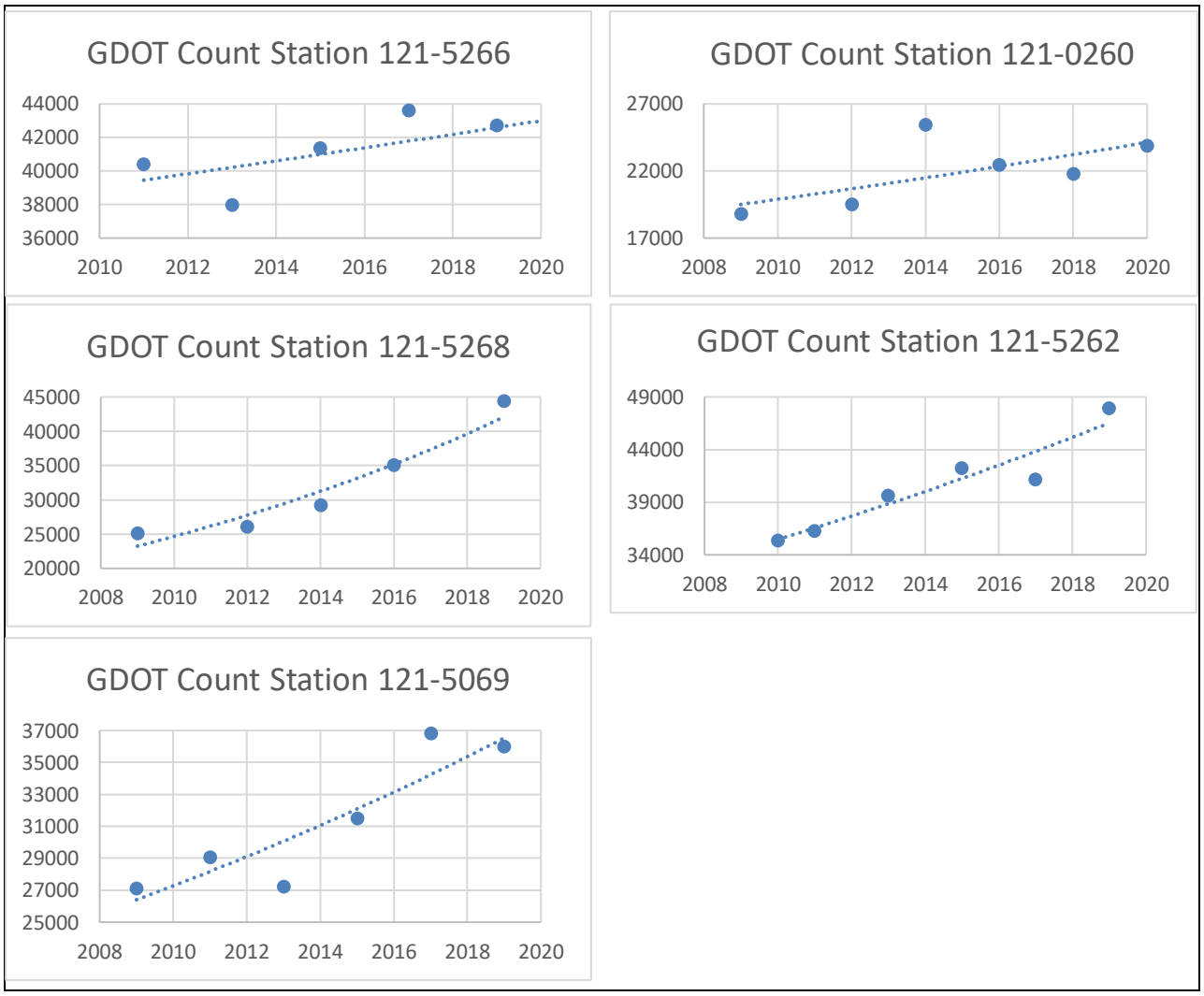
These count stations provide data collected from the Georgia Traffic Monitoring Program located on public roads. The counters are set approximately every 2 years for a period of 48 hours. This data is then processed to obtain hourly traffic volumes, vehicle classification, speeds, and average annual daily traffic (AADT) volumes. The data obtained for each count station along Fulton Industrial Boulevard by year is shown in Table 4.

An exponential curve was fitted to the data of each GDOT count station in order to determine the approximate growth rate at each location. The fitted curve is shown on the data graphs contained in Figure 3. The resulting rate for each count station is shown in the last row of Table 4.

Table 4: Historic GDOT Count Station Data

	Count Station				
	121-0260	**121-5262**	**121-5266**	**121-5268**	**121-5069**
2021			42563		
2020	23874				
2019		47937	42706	44374	36022
2018	21778				
2017		41154	43595		36822
2016	22424			35029	
2015		42268	41331		31508
2014	25434			29263	
2013		39606	37954		27220
2012	19490			26075	
2011		36282	40398		29077
2009	18762	35357		25122	27126
% growth	**1.93%**	**3.02%**	**0.95%**	**5.92%**	**3.25%**

Figure 3: Count Station Graphs



The average annual traffic volume growth rate for the years 2009 to 2021 is calculated to be 3.0%, however, a 3% growth rate is not sustainable through time. Previous studies for similarly built areas show a growth rate of approximately 1.5%. Therefore, a 1.5% growth rate will be used to forecast the traffic volumes for 2031, a 10-year horizon. This growth rate, compounded, represents an

increase of 16% in traffic by the year 2031 relative to 2021 conditions.

Corridor Analysis of future (2031) conditions:

The same analysis that was performed for the four roadway segments on Fulton Industrial Boulevard was repeated for the 2031 projected traffic volumes. This analysis was performed in order to determine if the corridor would present any deterioration in capacity based only on the projected growth of 1.5% per year. It was assumed that the proportion of trucks that utilize the corridor would remain the same. It was also assumed that the peak hour factors would remain the same. The results of the analysis for the four corridor segments is shown on Table 5.

Table 5: 2031 Multi-Lane Analysis Input Data and LOS - Fulton Industrial Boulevard

		Peak hour volume	Segment length (mi)	Access Points per Mile	Peak hour factor	Truck Percentage	LOS (Density in pc/mi/ln)
FIB from Campbellton Road to Camp Creek Pkwy.	NB	1114	3.48	4	0.93	10%	B (12.5)
	SB	1456		5	0.95	10%	B (16.0)
FIB from Camp Creek Pkwy to Wharton Drive SW	NB	1832	2.55	7	0.92	8%	C (24.8)
	SB	1456		7	0.98	9%	C (18.7)
FIB from Wharton Drive SW to I-20	NB	2093	1.32	17	0.93	9%	C (18.7)
	SB	1795		16	0.95	10%	C (18.4)
FIB from I-20 to Donald Lee Hollowell Pkwy.	NB	1300	2.48	11	0.92	21%	B (17.3)
	SB	1493		13	0.92	20%	D (30.6)

The results of the multi-lane roadway segment analysis for the future 2031 forecasted traffic volumes show that congestion levels would remain in the acceptable range (LOS D or lower). The worst performing roadway segment remains the southbound lanes of Fulton Industrial Boulevard from Donald Lee Hollowell Parkway to Interstate I-20. In this case the LOS has remained at D while the density has increased from 26.4 pc/mi/ln to 30.6 pc/mi/ln.

The analysis of these four segments of the Fulton Industrial Boulevard corridor shows that widening of Fulton Industrial Boulevard would not be necessary by the year 2031 since the traffic density would remain at acceptable levels of service despite the projected growth rate of 1.5% per year. If any congestion issued should arise along the corridor, it would likely be due to intersection or traffic signal design issues and could be addressed as such. The intersection analysis for future 2031 conditions which is described in the following section, should identify any future intersection design or signal design issues that may arise.

Intersection analysis – Future (2031) Conditions:

An analysis was performed for traffic forecasted for 2031 with the same geometry and design features as the existing (2021) conditions. The analysis was performed to detect any problems that may become apparent in the future and to identify potential solutions. The results of the intersection capacity analysis are shown on Table 6:

Table 6: LOS and Delay Results Summary for Future, 2031 Conditions.

Location	Control Type	AM		PM	
		LOS	Delay (s)	LOS	Delay (s)
Fulton Industrial @ SR 166/Campbellton Rd	Signal	C	21.4	D	43.0
Fulton Industrial @ Westgate Pkwy (S)	Stop	F	109.2	F	1231.0
Fulton Industrial @ Westgate Pkwy (N)	Stop	F	804.9	F	868.7
Fulton Industrial @ Tradewater Pkwy/Riverside Dr.	Stop	F	399.3	F	2274.1
Fulton Industrial @ Boat Rock Rd.	Signal	C	24.2	C	25.9
Fulton Industrial @ Lakeview Ct.	Signal	B	10.1	A	9.5
Fulton Industrial @ Camp Creek Pkwy	Signal	C	30.5	C	32.6
Fulton Industrial @ Great SW Pkwy/Cascade Rd.	Signal	D	49.2	**F**	**85.5**
v-Fulton Industrial @ Villanova / Westpark Pl	Stop	F	1620.8	F	13225.8
Fulton Industrial @ Great SW Pkwy	Signal	C	20.8	B	15.9
Fulton Industrial @ Bakers Ferry Rd	Signal	B	14.2	B	15.0
Fulton Indusrial @ Wharton Dr/Mendel Dr.	Signal	B	12.2	C	22.0
Fulton Industrial @ Marvin Miller Dr	Signal	A	7.6	A	6.0
Fulton Industrial @ Patton Drive	Signal	**F**	**116.1**	D	50.2
Fulton Industrial @ Commerce Circle (signal)	Signal	A	8.7	B	11.0
Fulton Industrial @ Fulton Industrial Circle	Stop	A	9.0	A	8.9
Fulton Industrial @ Shirley Dr	Signal	A	5.0	A	5.1
Fulton Industrial @ I-20 SB ramps	Signal	E	58.5	D	35.1
Fulton Industrial @ I-20 NB ramps	Signal	C	27.7	C	.31.7
Fulton Industrial @ Wendell Dr	Signal	A	5.3	B	11.9
Fulton Industrial @ MLK Jr. Dr.	Signal	E	58.3	**F**	**88.2**
Fulton Industrial @ Aviation Circle/Old Gordon Rd.	Signal	B	10.7	B	14.7
Fulton Industrial @ UPS north driveway	Signal	B	13.8	B	11.2
Donald Lee Hollowell Pkwy @ Atlanta Ind. Pkwy.	Signal	A	6.7	A	8.1
Fulton Industrial Blvd @ Donald Lee Hollowell (SR 8)	Signal	D	38.1	C	29.4
SR 8 @ Bolton Rd	Signal	A	9.3	B	16.6
SR 8 @ I-285 SB Ramps	Signal	D	52.9	C	33.1
SR 8 @ I-285 NB Ramps	Signal	C	23.6	C	26.4

The analysis for the future, 2031, forecasted volumes show that the unsignalized intersections that had failing levels of service, continue to display failing levels of service, which is expected. These intersections, as described previously, would benefit from signalization.

Three signalized intersections, however, show deterioration in their LOS and delays: Fulton Industrial Boulevard at Great SW Parkway/Cascade Road, which went from a LOS D with 50.3 seconds delay to a LOS F with 85.5 seconds delay in the PM peak hour; Fulton Industrial Boulevard

at Patton Drive, which went from a LOS E with 61.3 seconds of delay to a LOS F with 116.1 seconds of delay in the AM peak hour; and Fulton Industrial Boulevard at MLK Jr. Drive, which went from a LOS D with 49.8 second delay to LOS F with 88.2 seconds of delay during the PM peak hour.

These three intersections would require geometric improvements to mitigate the congestion caused by the projected growth in traffic volumes. A preliminary analysis shows that the intersection of Fulton Industrial Boulevard at Great SW Parkway/Cascade Road would improve to a LOS D with 54.4 seconds delay if a dual right turn lane was added to the Eastbound approach, converting the existing shared thru-right lane to a thru lane only, and if the westbound (Cascade Road) approach was converted from a single shared left-thru-right lane to three lanes (a left turn lane, a thru lane and a right turn lane) rather than a single lane.

Patton Drive would improve to a LOS D with 36.1 seconds of average delay, if a second left turn lane was implemented on Fulton Industrial Boulevard in the northbound direction, and the westbound approach of Patton Drive was provided with two lanes (a left-thru and a thru-right).

Similarly, a preliminary analysis of the intersection of Fulton Industrial Boulevard at MLK Jr. Drive revealed that the level of service and delay at this location would improve to a LOS D with an average delay of 48.3 seconds if a third southbound through lane was added to Fulton Industrial Boulevard. The Synchro analysis reports for these three intersections, with the described improvements, are included in the Appendix.

Conclusions and Recommendations:

The multilane roadway segment capacity analysis of the Fulton Industrial Boulevard corridor revealed that the existing number of lanes from SR 166 (Campbellton Road) to SR 8 (Donald Lee Holloway Parkway) is adequate for the traffic volumes and truck percentages that currently travel this roadway. Furthermore, the roadway would continue to operate at acceptable levels of service for the next 10 years, as a minimum, without any need for widening of any segment between SR 166 and SR 8. The segment of Fulton Industrial Boulevard which performs the least favorably is the segment between Interstate I-20 and SR 8 (Donald Lee Holloway Parkway). This is due to the higher number of driveways and side streets, especially in the vicinity of I-20, and the higher number of truck traffic present in this segment. However, the level of service for this segment is a "D" through the year 2031, which is in the acceptable range for this type of facility. Therefore, roadway widening is not recommended for any segment of Fulton Industrial Boulevard at this time or in the near future.

The intersection capacity analysis revealed that four unsignalized intersections along the corridor may require signalization at point in the future. The lack of adequate gaps on Fulton industrial Boulevard, high side-street volumes, in addition to a high percentage of heavy vehicles entering Fulton Industrial Boulevard from the side-streets is the likely cause of the delays at these stop-controlled intersections that could be reduced by the installation of traffic control signals. The four intersections in question are:

- Fulton Industrial Boulevard at Westgate Parkway (S)
- Fulton Industrial Boulevard at Westgate Parkway (N)
- Fulton Industrial Boulevard at Tradewater Pkwy/Riverside Drive
- Fulton Industrial Boulevard at Villanova / Westpark Place.

It is recommended that a traffic signal warrant analysis be performed for these four locations and that, if warranted, signalization or other means of intersection control, as determined by GDOT's intersection control evaluation (ICE) methodology, be pursued.

The intersection capacity analysis also identified a failing levels of service at two intersections by the year 2031. Different intersection improvements were tried in order to resolve the issues and further analyses were made to determine the effect of the measures. The results determined that in order to reduce delays and improve the levels of service at these three intersections the following improvements would be necessary:

Fulton Industrial Boulevard at Great SW Parkway/Cascade Road:

- Add a dual right-turn lane on Great SW Parkway (eastbound approach).
- Add a left turn lane and a right turn lane to Cascade Road (westbound approach)

Fulton Industrial Boulevard at Patton Drive:

- Add a second left turn lane on Fulton Industrial Boulevard in the northbound direction.
- Widen the westbound approach of Patton Drive to two lanes (a left-thru and a thru-right lane).

Fulton Industrial Boulevard at MLK Jr. Drive:

- Add a 3rd southbound through lane to Fulton Industrial Boulevard. Currently the southbound approach to MLK Jr. Drive has three lanes, but one becomes a right-turn lane (drop lane) into MLK Jr. Drive while the southbound departing leg has three lanes, one being a pick-up lane from the MLK Jr. Drive Eastbound right turn. Therefore, widening of Fulton Industrial

Boulevard would not be necessary to accommodate an additional southbound through lane.

Additionally, although the intersection of Fulton Industrial Boulevard at Campbellton Road (SR 166) will continue to perform at acceptable levels of service through 2031, it was observed that during the PM peak hour the westbound through movement (on Campbellton Road) presents an average delay of 45.5 seconds (LOS D), which generates a 95th percentile queue of 490 feet. This queue may cause difficulty for vehicles exiting the newly built BP gas station on the south-east corner of this intersection, attempting to turn left onto Campbellton Road. If this becomes an issue in the field, it is recommended that the gas station's driveway be converted to a right-in/right-out driveway as to avoid conflicts and potential crashes involving left-turning vehicles.

RECOMMENDED BY: …… **DATE:**…9/15/2021…

David A. Fairlie, P.E.
Senior Transportation Engineer

Appendix

Contents:

- 48-hour Counts (All Traffic Data)
- Turning Movement Counts (All Traffic Data)
- HCS Roadway Segment Analysis Reports (2021)
- HCS Roadway Segment Analysis Reports (2031)
- 2021 Intersection Analysis Reports (AM and PM)
- 2031 Intersection Analysis Reports (AM and PM)
- 2031 Intersections with Improvements Analysis Reports (AM and PM)

48-Hour Counts (All Traffic Data)

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
05/05/21	32	1	4	37
00:15	17	0	4	21
00:30	16	2	6	24
00:45	16	0	8	24
	81	3	22	106
01:00	14	0	3	17
01:15	11	0	6	17
01:30	17	0	6	23
01:45	17	1	4	22
	59	1	19	79
02:00	5	0	5	10
02:15	16	2	2	20
02:30	22	2	3	27
02:45	12	1	4	17
	55	5	14	74
03:00	12	0	2	14
03:15	26	2	2	30
03:30	21	1	0	22
03:45	24	1	3	28
	83	4	7	94
04:00	25	4	7	36
04:15	23	2	3	28
04:30	50	0	6	56
04:45	38	3	4	45
	136	9	20	165
05:00	54	0	2	56
05:15	85	2	6	93
05:30	105	5	7	117
05:45	122	6	6	134
	366	13	21	400
06:00	123	2	6	131
06:15	142	2	4	148
06:30	174	9	9	192
06:45	211	8	9	228
	650	21	28	699
07:00	175	6	8	189
07:15	191	5	15	211
07:30	215	16	18	249
07:45	219	9	15	243
	800	36	56	892
08:00	177	13	13	203
08:15	184	12	18	214
08:30	201	9	18	228
08:45	161	11	18	190
	723	45	67	835
09:00	115	15	23	153
09:15	120	11	24	155
09:30	114	8	18	140
09:45	114	9	21	144
	463	43	86	592
10:00	138	21	22	181
10:15	129	12	14	155
10:30	153	10	25	188
10:45	166	24	24	214
	586	67	85	738
11:00	140	13	35	188
11:15	108	11	17	136
11:30	159	12	24	195
11:45	143	13	23	179
	550	49	99	698
Total	4552	296	524	5372
Percent	84.7%	5.5%	9.8%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
12 PM	169	17	18	204
12:15	120	13	19	152
12:30	137	12	24	173
12:45	103	5	19	127
	529	47	80	656
13:00	132	10	18	160
13:15	138	5	16	159
13:30	111	13	29	153
13:45	130	9	30	169
	511	37	93	641
14:00	96	17	21	134
14:15	129	8	11	148
14:30	119	6	16	141
14:45	131	13	16	160
	475	44	64	583
15:00	143	10	15	168
15:15	161	5	20	186
15:30	178	13	21	212
15:45	141	11	18	170
	623	39	74	736
16:00	150	10	18	178
16:15	146	14	17	177
16:30	146	6	15	167
16:45	152	9	15	176
	594	39	65	698
17:00	175	3	17	195
17:15	134	8	15	157
17:30	148	8	13	169
17:45	114	8	11	133
	571	27	56	654
18:00	121	9	15	145
18:15	124	10	12	146
18:30	118	6	12	136
18:45	111	4	12	127
	474	29	51	554
19:00	100	7	13	120
19:15	101	10	12	123
19:30	86	6	9	101
19:45	86	5	7	98
	373	28	41	442
20:00	86	6	11	103
20:15	99	2	7	108
20:30	106	1	8	115
20:45	78	2	7	87
	369	11	33	413
21:00	56	5	12	73
21:15	66	0	8	74
21:30	58	1	7	66
21:45	54	2	10	66
	234	8	37	279
22:00	44	0	6	50
22:15	37	1	6	44
22:30	54	1	3	58
22:45	57	1	5	63
	192	3	20	215
23:00	51	2	7	60
23:15	28	1	3	32
23:30	39	0	3	42
23:45	28	0	9	37
	146	3	22	171
Total	5091	315	636	6042
Percent	84.3%	5.2%	10.5%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
05/06/21	36	5	1	42
00:15	28	4	1	33
00:30	23	3	1	27
00:45	22	3	4	29
	109	15	7	131
01:00	23	0	6	29
01:15	22	0	1	23
01:30	25	0	3	28
01:45	14	0	5	19
	84	0	15	99
02:00	18	1	2	21
02:15	18	1	7	26
02:30	22	0	3	25
02:45	14	1	5	20
	72	3	17	92
03:00	23	1	5	29
03:15	18	5	4	27
03:30	27	6	1	34
03:45	29	1	4	34
	97	13	14	124
04:00	29	1	3	33
04:15	21	4	4	29
04:30	50	3	2	55
04:45	48	2	3	53
	148	10	12	170
05:00	47	1	6	54
05:15	86	4	2	92
05:30	108	5	7	120
05:45	104	1	6	111
	345	11	21	377
06:00	138	6	2	146
06:15	136	7	9	152
06:30	183	3	6	192
06:45	202	9	3	214
	659	25	20	704
07:00	197	7	10	214
07:15	213	7	15	235
07:30	237	13	14	264
07:45	224	13	8	245
	871	40	47	958
08:00	178	20	18	216
08:15	191	14	10	215
08:30	155	12	16	183
08:45	150	11	19	180
	674	57	63	794
09:00	124	8	20	152
09:15	119	12	17	148
09:30	104	15	33	152
09:45	110	17	21	148
	457	52	91	600
10:00	108	12	14	134
10:15	126	18	20	164
10:30	153	16	30	199
10:45	161	16	33	210
	548	62	97	707
11:00	130	19	30	179
11:15	108	10	23	141
11:30	152	18	22	192
11:45	120	20	21	161
	510	67	96	673
Total	4574	355	500	5429
Percent	84.3%	6.5%	9.2%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
12 PM	140	23	23	186
12:15	127	10	28	165
12:30	121	11	22	154
12:45	128	12	25	165
	516	56	98	670
13:00	122	11	12	145
13:15	89	18	16	123
13:30	120	11	25	156
13:45	114	6	26	146
	445	46	79	570
14:00	109	11	28	148
14:15	126	13	25	164
14:30	143	20	22	185
14:45	106	9	14	129
	484	53	89	626
15:00	130	11	24	165
15:15	137	11	24	172
15:30	149	13	37	199
15:45	146	5	15	166
	562	40	100	702
16:00	156	7	16	179
16:15	140	7	24	171
16:30	177	14	24	215
16:45	146	8	19	173
	619	36	83	738
17:00	153	7	19	179
17:15	152	7	17	176
17:30	156	10	14	180
17:45	148	8	7	163
	609	32	57	698
18:00	122	4	7	133
18:15	140	6	15	161
18:30	109	10	13	132
18:45	112	8	11	131
	483	28	46	557
19:00	99	5	6	110
19:15	91	2	13	106
19:30	92	3	4	99
19:45	79	5	5	89
	361	15	28	404
20:00	78	2	17	97
20:15	88	5	7	100
20:30	113	3	8	124
20:45	100	4	13	117
	379	14	45	438
21:00	68	0	5	73
21:15	86	6	6	98
21:30	71	1	7	79
21:45	49	0	6	55
	274	7	24	305
22:00	42	3	11	56
22:15	57	4	4	65
22:30	55	1	2	58
22:45	49	2	6	57
	203	10	23	236
23:00	49	1	6	56
23:15	37	4	7	48
23:30	26	2	4	32
23:45	23	0	1	24
	135	7	18	160
Total	5070	344	690	6104
Percent	83.1%	5.6%	11.3%	100.0%
Grand Total	19287	1310	2350	22947
Percent	84.1%	5.7%	10.2%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
05/05/21	29	1	3	33
00:15	31	1	6	38
00:30	32	1	10	43
00:45	19	2	4	25
	111	5	23	139
01:00	36	2	5	43
01:15	25	1	0	26
01:30	15	1	3	19
01:45	18	1	3	22
	94	5	11	110
02:00	11	1	1	13
02:15	12	0	1	13
02:30	22	1	0	23
02:45	10	0	5	15
	55	2	7	64
03:00	18	1	2	21
03:15	16	2	2	20
03:30	10	1	6	17
03:45	20	1	3	24
	64	5	13	82
04:00	15	1	6	22
04:15	14	1	1	16
04:30	29	1	3	33
04:45	31	1	5	37
	89	4	15	108
05:00	18	3	6	27
05:15	42	3	8	53
05:30	45	4	12	61
05:45	86	2	12	100
	191	12	38	241
06:00	60	5	10	75
06:15	58	6	12	76
06:30	68	5	14	87
06:45	139	5	9	153
	325	21	45	391
07:00	107	13	19	139
07:15	86	8	14	108
07:30	108	11	11	130
07:45	113	8	19	140
	414	40	63	517
08:00	114	10	17	141
08:15	105	15	16	136
08:30	86	11	23	120
08:45	92	7	21	120
	397	43	77	517
09:00	88	14	38	140
09:15	105	11	28	144
09:30	96	8	26	130
09:45	134	14	21	169
	423	47	113	583
10:00	114	12	31	157
10:15	91	22	20	133
10:30	116	9	22	147
10:45	116	10	23	149
	437	53	96	586
11:00	128	18	27	173
11:15	100	10	26	136
11:30	105	8	21	134
11:45	114	12	18	144
	447	48	92	587
Total	3047	285	593	3925
Percent	77.6%	7.3%	15.1%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
12 PM	110	12	29	151
12:15	118	15	15	148
12:30	126	7	23	156
12:45	136	7	19	162
	490	41	86	617
13:00	111	13	20	144
13:15	117	10	24	151
13:30	107	14	19	140
13:45	132	12	16	160
	467	49	79	595
14:00	110	9	13	132
14:15	114	8	25	147
14:30	147	15	24	186
14:45	137	12	16	165
	508	44	78	630
15:00	166	15	17	198
15:15	181	15	30	226
15:30	198	12	21	231
15:45	201	12	22	235
	746	54	90	890
16:00	213	10	14	237
16:15	225	11	24	260
16:30	266	5	14	285
16:45	231	9	18	258
	935	35	70	1040
17:00	306	9	18	333
17:15	282	14	12	308
17:30	249	8	15	272
17:45	245	8	19	272
	1082	39	64	1185
18:00	208	10	16	234
18:15	216	6	16	238
18:30	169	5	11	185
18:45	162	8	10	180
	755	29	53	837
19:00	131	3	10	144
19:15	153	6	18	177
19:30	137	7	18	162
19:45	140	0	10	150
	561	16	56	633
20:00	125	6	10	141
20:15	122	8	15	145
20:30	115	2	11	128
20:45	100	1	11	112
	462	17	47	526
21:00	80	1	9	90
21:15	80	2	9	91
21:30	86	1	6	93
21:45	75	3	11	89
	321	7	35	363
22:00	68	3	4	75
22:15	68	0	4	72
22:30	62	2	3	67
22:45	61	2	5	68
	259	7	16	282
23:00	80	0	10	90
23:15	70	3	3	76
23:30	65	1	2	68
23:45	57	0	2	59
	272	4	17	293
Total	6858	342	691	7891
Percent	86.9%	4.3%	8.8%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
05/06/21	47	1	2	50
00:15	43	1	2	46
00:30	29	1	2	32
00:45	34	1	4	39
	153	4	10	167
01:00	34	0	1	35
01:15	34	1	4	39
01:30	19	0	1	20
01:45	19	2	3	24
	106	3	9	118
02:00	31	2	5	38
02:15	28	0	2	30
02:30	20	1	2	23
02:45	29	1	5	35
	108	4	14	126
03:00	18	0	1	19
03:15	24	3	4	31
03:30	20	3	1	24
03:45	33	3	2	38
	95	9	8	112
04:00	21	3	6	30
04:15	19	2	6	27
04:30	36	1	4	41
04:45	45	2	7	54
	121	8	23	152
05:00	20	4	4	28
05:15	39	3	3	45
05:30	48	3	15	66
05:45	87	2	9	98
	194	12	31	237
06:00	65	4	12	81
06:15	56	3	11	70
06:30	69	5	14	88
06:45	134	7	13	154
	324	19	50	393
07:00	108	9	14	131
07:15	96	17	14	127
07:30	116	12	17	145
07:45	122	14	20	156
	442	52	65	559
08:00	111	11	13	135
08:15	99	8	18	125
08:30	81	19	12	112
08:45	91	11	22	124
	382	49	65	496
09:00	97	12	23	132
09:15	109	16	24	149
09:30	81	16	24	121
09:45	118	23	15	156
	405	67	86	558
10:00	107	13	20	140
10:15	112	8	31	151
10:30	83	17	29	129
10:45	104	10	17	131
	406	48	97	551
11:00	107	10	34	151
11:15	92	12	24	128
11:30	84	18	33	135
11:45	96	10	19	125
	379	50	110	539
Total	3115	325	568	4008
Percent	77.7%	8.1%	14.2%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 1
Station ID: 1
FULTON IND BLVD NORTH OF RIVERSIDE DR

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
12 PM	109	10	25	144
12:15	102	14	12	128
12:30	120	12	23	155
12:45	121	18	13	152
	452	54	73	579
13:00	94	16	29	139
13:15	116	9	25	150
13:30	135	20	15	170
13:45	159	9	18	186
	504	54	87	645
14:00	159	14	29	202
14:15	137	7	18	162
14:30	177	14	15	206
14:45	169	8	30	207
	642	43	92	777
15:00	178	6	22	206
15:15	185	10	18	213
15:30	195	5	21	221
15:45	212	9	17	238
	770	30	78	878
16:00	228	14	20	262
16:15	238	8	18	264
16:30	297	9	12	318
16:45	245	10	23	278
	1008	41	73	1122
17:00	306	10	25	341
17:15	293	9	16	318
17:30	270	12	13	295
17:45	237	5	7	249
	1106	36	61	1203
18:00	218	6	12	236
18:15	206	5	10	221
18:30	174	3	16	193
18:45	140	5	14	159
	738	19	52	809
19:00	154	7	7	168
19:15	139	5	7	151
19:30	146	4	13	163
19:45	137	2	15	154
	576	18	42	636
20:00	153	5	14	172
20:15	160	4	18	182
20:30	112	1	15	128
20:45	122	1	7	130
	547	11	54	612
21:00	96	0	6	102
21:15	91	1	11	103
21:30	90	6	7	103
21:45	78	3	11	92
	355	10	35	400
22:00	99	6	3	108
22:15	120	3	3	126
22:30	79	1	7	87
22:45	61	1	6	68
	359	11	19	389
23:00	102	1	3	106
23:15	62	2	4	68
23:30	50	1	2	53
23:45	54	0	4	58
	268	4	13	285
Total	7325	331	679	8335
Percent	87.9%	4.0%	8.1%	100.0%
Grand Total	20345	1283	2531	24159
Percent	84.2%	5.3%	10.5%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
05/05/21	35	5	5	45
00:15	27	4	8	39
00:30	47	2	9	58
00:45	24	3	6	33
	133	14	28	175
01:00	31	1	9	41
01:15	27	1	4	32
01:30	28	1	6	35
01:45	23	2	7	32
	109	5	26	140
02:00	16	2	4	22
02:15	22	2	10	34
02:30	33	1	4	38
02:45	32	4	3	39
	103	9	21	133
03:00	18	1	10	29
03:15	23	1	5	29
03:30	22	1	10	33
03:45	21	1	4	26
	84	4	29	117
04:00	36	2	10	48
04:15	31	6	5	42
04:30	62	3	6	71
04:45	55	2	7	64
	184	13	28	225
05:00	62	3	8	73
05:15	104	3	10	117
05:30	126	5	7	138
05:45	171	6	11	188
	463	17	36	516
06:00	161	6	12	179
06:15	224	2	6	232
06:30	266	15	7	288
06:45	303	8	7	318
	954	31	32	1017
07:00	322	14	16	352
07:15	354	15	19	388
07:30	336	16	27	379
07:45	353	28	16	397
	1365	73	78	1516
08:00	318	18	18	354
08:15	300	16	20	336
08:30	253	21	26	300
08:45	251	18	25	294
	1122	73	89	1284
09:00	199	15	29	243
09:15	193	20	23	236
09:30	189	13	27	229
09:45	174	16	27	217
	755	64	106	925
10:00	180	19	36	235
10:15	200	15	27	242
10:30	204	15	24	243
10:45	237	17	27	281
	821	66	114	1001
11:00	271	11	31	313
11:15	275	22	28	325
11:30	256	15	19	290
11:45	236	11	39	286
	1038	59	117	1214
Total	7131	428	704	8263
Percent	86.3%	5.2%	8.5%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
12 PM	245	22	31	298
12:15	246	24	37	307
12:30	231	23	30	284
12:45	177	10	23	210
	899	79	121	1099
13:00	232	17	21	270
13:15	247	15	29	291
13:30	193	21	24	238
13:45	207	18	31	256
	879	71	105	1055
14:00	209	15	30	254
14:15	246	18	18	282
14:30	245	11	28	284
14:45	258	22	19	299
	958	66	95	1119
15:00	238	12	19	269
15:15	268	9	26	303
15:30	296	9	24	329
15:45	269	17	19	305
	1071	47	88	1206
16:00	267	15	21	303
16:15	243	15	20	278
16:30	302	14	11	327
16:45	284	13	16	313
	1096	57	68	1221
17:00	275	8	16	299
17:15	292	8	15	315
17:30	262	13	10	285
17:45	250	12	10	272
	1079	41	51	1171
18:00	270	9	18	297
18:15	216	6	16	238
18:30	234	18	15	267
18:45	201	7	6	214
	921	40	55	1016
19:00	169	9	10	188
19:15	149	9	12	170
19:30	154	9	14	177
19:45	130	8	8	146
	602	35	44	681
20:00	123	5	10	138
20:15	129	4	11	144
20:30	168	5	12	185
20:45	123	6	13	142
	543	20	46	609
21:00	98	4	9	111
21:15	95	4	13	112
21:30	105	2	7	114
21:45	79	4	6	89
	377	14	35	426
22:00	79	1	9	89
22:15	67	1	8	76
22:30	88	2	11	101
22:45	100	2	11	113
	334	6	39	379
23:00	59	4	13	76
23:15	59	2	8	69
23:30	64	1	8	73
23:45	36	1	4	41
	218	8	33	259
Total	8977	484	780	10241
Percent	87.7%	4.7%	7.6%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
05/06/21	50	1	10	61
00:15	50	1	7	58
00:30	50	3	7	60
00:45	27	2	10	39
	177	7	34	218
01:00	39	0	7	46
01:15	36	2	4	42
01:30	31	1	6	38
01:45	23	1	1	25
	129	4	18	151
02:00	26	1	8	35
02:15	25	2	9	36
02:30	35	4	4	43
02:45	43	1	9	53
	129	8	30	167
03:00	24	0	11	35
03:15	32	4	7	43
03:30	28	2	7	37
03:45	34	3	6	43
	118	9	31	158
04:00	45	2	8	55
04:15	24	4	14	42
04:30	63	4	8	75
04:45	65	0	10	75
	197	10	40	247
05:00	71	6	10	87
05:15	108	3	2	113
05:30	119	5	6	130
05:45	165	8	7	180
	463	22	25	510
06:00	176	5	8	189
06:15	236	9	14	259
06:30	261	6	10	277
06:45	326	11	7	344
	999	31	39	1069
07:00	353	12	18	383
07:15	361	12	23	396
07:30	350	12	23	385
07:45	354	13	24	391
	1418	49	88	1555
08:00	366	23	18	407
08:15	295	20	21	336
08:30	234	21	24	279
08:45	246	13	20	279
	1141	77	83	1301
09:00	200	12	25	237
09:15	173	21	24	218
09:30	183	15	24	222
09:45	181	16	33	230
	737	64	106	907
10:00	187	19	19	225
10:15	192	22	31	245
10:30	194	15	28	237
10:45	186	25	39	250
	759	81	117	957
11:00	208	21	32	261
11:15	188	23	40	251
11:30	188	18	21	227
11:45	223	28	25	276
	807	90	118	1015
Total	7074	452	729	8255
Percent	85.7%	5.5%	8.8%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
12 PM	221	13	24	258
12:15	257	18	25	300
12:30	232	12	27	271
12:45	217	20	27	264
	927	63	103	1093
13:00	208	20	31	259
13:15	200	23	26	249
13:30	203	15	24	242
13:45	202	12	26	240
	813	70	107	990
14:00	192	19	20	231
14:15	226	13	21	260
14:30	252	22	28	302
14:45	196	17	19	232
	866	71	88	1025
15:00	215	19	20	254
15:15	264	15	17	296
15:30	257	19	25	301
15:45	283	14	20	317
	1019	67	82	1168
16:00	265	13	23	301
16:15	238	5	21	264
16:30	331	20	18	369
16:45	276	21	21	318
	1110	59	83	1252
17:00	328	9	14	351
17:15	299	8	18	325
17:30	314	14	16	344
17:45	300	19	12	331
	1241	50	60	1351
18:00	273	7	14	294
18:15	251	3	13	267
18:30	197	11	13	221
18:45	196	4	9	209
	917	25	49	991
19:00	156	6	17	179
19:15	146	4	12	162
19:30	122	7	10	139
19:45	141	7	8	156
	565	24	47	636
20:00	155	11	8	174
20:15	133	10	12	155
20:30	140	10	12	162
20:45	164	8	11	183
	592	39	43	674
21:00	114	6	12	132
21:15	113	3	4	120
21:30	108	5	4	117
21:45	99	1	9	109
	434	15	29	478
22:00	92	3	8	103
22:15	80	6	7	93
22:30	83	0	9	92
22:45	89	4	11	104
	344	13	35	392
23:00	72	2	11	85
23:15	73	1	13	87
23:30	37	2	11	50
23:45	44	0	6	50
	226	5	41	272
Total	9054	501	767	10322
Percent	87.7%	4.9%	7.4%	100.0%
Grand Total	32236	1865	2980	37081
Percent	86.9%	5.0%	8.0%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
05/05/21	51	1	10	62
00:15	48	4	11	63
00:30	33	3	7	43
00:45	35	3	6	44
	167	11	34	212
01:00	50	3	7	60
01:15	30	0	7	37
01:30	33	2	16	51
01:45	24	3	6	33
	137	8	36	181
02:00	29	3	6	38
02:15	29	0	10	39
02:30	18	3	10	31
02:45	19	3	6	28
	95	9	32	136
03:00	36	5	8	49
03:15	27	3	5	35
03:30	28	1	4	33
03:45	30	3	6	39
	121	12	23	156
04:00	23	2	4	29
04:15	42	2	5	49
04:30	54	3	9	66
04:45	53	4	10	67
	172	11	28	211
05:00	48	6	3	57
05:15	55	1	6	62
05:30	105	9	11	125
05:45	131	6	12	149
	339	22	32	393
06:00	95	6	12	113
06:15	113	6	21	140
06:30	131	7	15	153
06:45	207	10	16	233
	546	29	64	639
07:00	147	13	15	175
07:15	150	14	12	176
07:30	158	17	21	196
07:45	188	14	16	218
	643	58	64	765
08:00	186	11	26	223
08:15	180	13	27	220
08:30	140	14	16	170
08:45	165	11	12	188
	671	49	81	801
09:00	134	19	16	169
09:15	174	19	26	219
09:30	175	23	21	219
09:45	187	32	32	251
	670	93	95	858
10:00	141	17	26	184
10:15	164	20	23	207
10:30	178	22	35	235
10:45	160	13	35	208
	643	72	119	834
11:00	188	18	30	236
11:15	191	12	27	230
11:30	210	11	26	247
11:45	175	24	25	224
	764	65	108	937
Total	4968	439	716	6123
Percent	81.1%	7.2%	11.7%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
12 PM	183	11	23	217
12:15	179	17	23	219
12:30	187	17	23	227
12:45	197	17	15	229
	746	62	84	892
13:00	199	15	31	245
13:15	205	15	23	243
13:30	190	16	24	230
13:45	220	9	30	259
	814	55	108	977
14:00	191	11	22	224
14:15	224	18	20	262
14:30	205	14	22	241
14:45	209	12	24	245
	829	55	88	972
15:00	259	12	21	292
15:15	236	20	24	280
15:30	301	10	19	330
15:45	237	13	22	272
	1033	55	86	1174
16:00	369	16	18	403
16:15	252	11	25	288
16:30	287	9	19	315
16:45	273	18	20	311
	1181	54	82	1317
17:00	312	6	12	330
17:15	273	11	13	297
17:30	273	8	18	299
17:45	260	7	20	287
	1118	32	63	1213
18:00	257	8	14	279
18:15	242	11	14	267
18:30	208	4	17	229
18:45	187	10	10	207
	894	33	55	982
19:00	208	7	18	233
19:15	157	11	15	183
19:30	189	9	11	209
19:45	173	6	11	190
	727	33	55	815
20:00	151	3	12	166
20:15	190	4	16	210
20:30	126	5	11	142
20:45	109	3	11	123
	576	15	50	641
21:00	101	4	14	119
21:15	136	1	4	141
21:30	115	7	7	129
21:45	117	5	15	137
	469	17	40	526
22:00	95	1	6	102
22:15	100	5	6	111
22:30	96	2	4	102
22:45	143	0	9	152
	434	8	25	467
23:00	105	2	10	117
23:15	114	4	8	126
23:30	108	2	5	115
23:45	63	1	7	71
	390	9	30	429
Total	9211	428	766	10405
Percent	88.5%	4.1%	7.4%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
05/06/21	58	3	7	68
00:15	68	3	6	77
00:30	70	4	9	83
00:45	62	3	2	67
	258	13	24	295
01:00	50	1	8	59
01:15	42	1	4	47
01:30	44	1	5	50
01:45	32	3	7	42
	168	6	24	198
02:00	29	2	7	38
02:15	36	1	6	43
02:30	42	0	9	51
02:45	48	3	7	58
	155	6	29	190
03:00	39	2	7	48
03:15	42	3	4	49
03:30	42	6	3	51
03:45	42	0	5	47
	165	11	19	195
04:00	33	3	8	44
04:15	39	4	10	53
04:30	70	4	7	81
04:45	66	9	3	78
	208	20	28	256
05:00	67	3	7	77
05:15	60	6	8	74
05:30	105	6	13	124
05:45	115	9	9	133
	347	24	37	408
06:00	107	4	11	122
06:15	122	3	15	140
06:30	170	15	14	199
06:45	187	9	8	204
	586	31	48	665
07:00	158	8	16	182
07:15	206	24	12	242
07:30	180	22	22	224
07:45	170	18	11	199
	714	72	61	847
08:00	173	16	18	207
08:15	159	13	12	184
08:30	134	15	20	169
08:45	184	21	18	223
	650	65	68	783
09:00	151	11	26	188
09:15	156	20	26	202
09:30	159	26	20	205
09:45	181	33	24	238
	647	90	96	833
10:00	161	25	29	215
10:15	160	25	42	227
10:30	151	14	24	189
10:45	159	17	38	214
	631	81	133	845
11:00	167	23	28	218
11:15	145	16	35	196
11:30	177	24	25	226
11:45	184	21	22	227
	673	84	110	867
Total	5202	503	677	6382
Percent	81.5%	7.9%	10.6%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 2
Station ID: 2
FULTON IND BLVD NORTH OF CASCADE ROAD

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
12 PM	231	19	38	288
12:15	221	21	30	272
12:30	176	16	26	218
12:45	193	16	26	235
	821	72	120	1013
13:00	206	20	31	257
13:15	208	14	28	250
13:30	206	14	21	241
13:45	235	24	31	290
	855	72	111	1038
14:00	214	27	29	270
14:15	218	16	28	262
14:30	224	12	30	266
14:45	243	16	24	283
	899	71	111	1081
15:00	237	15	22	274
15:15	247	10	28	285
15:30	308	10	22	340
15:45	232	13	21	266
	1024	48	93	1165
16:00	345	14	17	376
16:15	284	9	12	305
16:30	312	14	20	346
16:45	288	19	25	332
	1229	56	74	1359
17:00	316	10	22	348
17:15	293	15	10	318
17:30	277	12	16	305
17:45	235	7	22	264
	1121	44	70	1235
18:00	266	12	18	296
18:15	251	7	18	276
18:30	209	7	23	239
18:45	205	9	14	228
	931	35	73	1039
19:00	183	10	14	207
19:15	170	8	17	195
19:30	189	8	14	211
19:45	200	11	9	220
	742	37	54	833
20:00	285	12	21	318
20:15	243	8	18	269
20:30	174	4	14	192
20:45	179	3	7	189
	881	27	60	968
21:00	130	2	6	138
21:15	131	7	8	146
21:30	128	4	11	143
21:45	118	5	4	127
	507	18	29	554
22:00	131	8	6	145
22:15	124	6	5	135
22:30	113	3	8	124
22:45	115	2	12	129
	483	19	31	533
23:00	109	3	8	120
23:15	69	4	7	80
23:30	105	1	3	109
23:45	73	1	7	81
	356	9	25	390
Total	9849	508	851	11208
Percent	87.9%	4.5%	7.6%	100.0%
Grand Total	29230	1878	3010	34118
Percent	85.7%	5.5%	8.8%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
05/05/21	38	3	6	47
00:15	33	2	6	41
00:30	33	2	11	46
00:45	26	3	9	38
	130	10	32	172
01:00	34	4	7	45
01:15	23	1	7	31
01:30	34	2	5	41
01:45	30	2	11	43
	121	9	30	160
02:00	21	2	5	28
02:15	21	4	10	35
02:30	29	3	7	39
02:45	35	3	7	45
	106	12	29	147
03:00	26	1	17	44
03:15	31	4	7	42
03:30	24	4	9	37
03:45	20	4	4	28
	101	13	37	151
04:00	25	2	14	41
04:15	36	5	9	50
04:30	41	8	15	64
04:45	51	4	15	70
	153	19	53	225
05:00	61	6	18	85
05:15	87	11	13	111
05:30	90	15	17	122
05:45	95	12	19	126
	333	44	67	444
06:00	160	16	21	197
06:15	146	13	13	172
06:30	164	21	15	200
06:45	165	12	11	188
	635	62	60	757
07:00	263	29	19	311
07:15	279	25	20	324
07:30	266	29	30	325
07:45	257	36	22	315
	1065	119	91	1275
08:00	236	29	23	288
08:15	231	35	31	297
08:30	204	35	33	272
08:45	206	25	32	263
	877	124	119	1120
09:00	183	26	44	253
09:15	176	18	29	223
09:30	171	17	31	219
09:45	184	17	38	239
	714	78	142	934
10:00	167	33	39	239
10:15	190	35	33	258
10:30	233	20	30	283
10:45	244	31	34	309
	834	119	136	1089
11:00	248	21	44	313
11:15	256	33	42	331
11:30	268	24	23	315
11:45	230	20	45	295
	1002	98	154	1254
Total	6071	707	950	7728
Percent	78.6%	9.1%	12.3%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
12 PM	254	25	38	317
12:15	228	31	38	297
12:30	227	27	37	291
12:45	182	26	30	238
	891	109	143	1143
13:00	209	21	21	251
13:15	248	22	24	294
13:30	224	23	40	287
13:45	227	24	33	284
	908	90	118	1116
14:00	242	21	33	296
14:15	263	20	26	309
14:30	282	18	30	330
14:45	275	23	28	326
	1062	82	117	1261
15:00	308	23	24	355
15:15	328	14	35	377
15:30	477	17	27	521
15:45	308	21	22	351
	1421	75	108	1604
16:00	402	19	23	444
16:15	357	24	28	409
16:30	449	16	16	481
16:45	394	20	16	430
	1602	79	83	1764
17:00	427	10	24	461
17:15	396	12	25	433
17:30	316	9	15	340
17:45	317	11	16	344
	1456	42	80	1578
18:00	372	12	16	400
18:15	285	5	16	306
18:30	270	18	18	306
18:45	248	10	11	269
	1175	45	61	1281
19:00	237	11	13	261
19:15	175	8	14	197
19:30	169	9	13	191
19:45	139	9	14	162
	720	37	54	811
20:00	145	7	13	165
20:15	130	11	13	154
20:30	152	6	13	171
20:45	151	9	12	172
	578	33	51	662
21:00	116	8	12	136
21:15	112	5	17	134
21:30	124	7	9	140
21:45	96	5	9	110
	448	25	47	520
22:00	83	3	9	95
22:15	89	1	10	100
22:30	109	3	9	121
22:45	101	3	9	113
	382	10	37	429
23:00	110	5	13	128
23:15	87	2	9	98
23:30	71	3	13	87
23:45	47	1	6	54
	315	11	41	367
Total	10958	638	940	12536
Percent	87.4%	5.1%	7.5%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
05/06/21	71	4	11	86
00:15	60	4	7	71
00:30	68	5	6	79
00:45	45	2	10	57
	244	15	34	293
01:00	45	3	9	57
01:15	41	4	5	50
01:30	36	3	10	49
01:45	25	3	5	33
	147	13	29	189
02:00	24	0	8	32
02:15	21	2	10	33
02:30	39	4	5	48
02:45	39	5	9	53
	123	11	32	166
03:00	33	3	9	45
03:15	28	6	7	41
03:30	29	6	12	47
03:45	27	3	13	43
	117	18	41	176
04:00	33	4	10	47
04:15	32	4	12	48
04:30	52	8	18	78
04:45	49	6	15	70
	166	22	55	243
05:00	72	6	19	97
05:15	87	8	6	101
05:30	95	13	14	122
05:45	103	16	14	133
	357	43	53	453
06:00	147	15	28	190
06:15	163	18	20	201
06:30	164	29	19	212
06:45	208	16	23	247
	682	78	90	850
07:00	274	33	22	329
07:15	278	29	20	327
07:30	294	20	31	345
07:45	262	18	25	305
	1108	100	98	1306
08:00	260	33	19	312
08:15	267	36	34	337
08:30	218	28	31	277
08:45	190	26	26	242
	935	123	110	1168
09:00	195	23	28	246
09:15	172	36	36	244
09:30	149	26	30	205
09:45	167	27	33	227
	683	112	127	922
10:00	167	23	37	227
10:15	204	34	41	279
10:30	195	33	22	250
10:45	198	40	48	286
	764	130	148	1042
11:00	191	22	38	251
11:15	190	27	48	265
11:30	190	23	40	253
11:45	193	30	29	252
	764	102	155	1021
Total	6090	767	972	7829
Percent	77.8%	9.8%	12.4%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

NB

Start Time	Lights	Mediums	Trucks	Total
12 PM	236	27	33	296
12:15	241	32	42	315
12:30	208	24	35	267
12:45	205	23	31	259
	890	106	141	1137
13:00	210	29	40	279
13:15	204	35	28	267
13:30	206	18	34	258
13:45	213	14	27	254
	833	96	129	1058
14:00	225	28	23	276
14:15	229	25	35	289
14:30	275	27	32	334
14:45	246	23	21	290
	975	103	111	1189
15:00	319	23	24	366
15:15	301	26	26	353
15:30	407	25	35	467
15:45	342	16	36	394
	1369	90	121	1580
16:00	408	25	18	451
16:15	368	15	25	408
16:30	443	17	18	478
16:45	386	24	24	434
	1605	81	85	1771
17:00	416	17	25	458
17:15	402	15	20	437
17:30	416	16	19	451
17:45	357	16	12	385
	1591	64	76	1731
18:00	378	12	13	403
18:15	290	6	12	308
18:30	221	12	15	248
18:45	215	8	10	233
	1104	38	50	1192
19:00	207	8	16	231
19:15	175	8	18	201
19:30	153	8	12	173
19:45	157	9	5	171
	692	33	51	776
20:00	150	12	9	171
20:15	142	10	11	163
20:30	147	11	11	169
20:45	191	14	19	224
	630	47	50	727
21:00	136	6	21	163
21:15	131	5	5	141
21:30	118	3	5	126
21:45	103	4	6	113
	488	18	37	543
22:00	105	4	7	116
22:15	93	6	7	106
22:30	97	3	12	112
22:45	93	5	10	108
	388	18	36	442
23:00	111	6	10	127
23:15	98	2	13	113
23:30	54	3	9	66
23:45	45	3	6	54
	308	14	38	360
Total	10873	708	925	12506
Percent	86.9%	5.7%	7.4%	100.0%
Grand Total	33992	2820	3787	40599
Percent	83.7%	6.9%	9.3%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
05/05/21	60	2	15	77
00:15	56	4	8	68
00:30	39	3	8	50
00:45	40	5	9	54
	195	14	40	249
01:00	44	4	6	54
01:15	28	2	7	37
01:30	25	2	18	45
01:45	26	8	6	40
	123	16	37	176
02:00	24	4	9	37
02:15	31	1	5	37
02:30	25	7	9	41
02:45	31	4	7	42
	111	16	30	157
03:00	33	3	3	39
03:15	33	2	4	39
03:30	39	2	10	51
03:45	45	3	7	55
	150	10	24	184
04:00	39	3	6	48
04:15	74	2	7	83
04:30	93	5	16	114
04:45	117	7	8	132
	323	17	37	377
05:00	92	5	5	102
05:15	114	9	10	133
05:30	198	6	13	217
05:45	307	12	14	333
	711	32	42	785
06:00	185	11	17	213
06:15	231	14	25	270
06:30	285	14	17	316
06:45	529	14	23	566
	1230	53	82	1365
07:00	275	18	15	308
07:15	245	24	31	300
07:30	311	29	33	373
07:45	306	14	24	344
	1137	85	103	1325
08:00	309	25	36	370
08:15	229	21	35	285
08:30	231	16	20	267
08:45	240	15	30	285
	1009	77	121	1207
09:00	246	23	31	300
09:15	247	30	23	300
09:30	286	35	41	362
09:45	205	43	33	281
	984	131	128	1243
10:00	217	30	30	277
10:15	212	34	33	279
10:30	231	34	36	301
10:45	216	25	53	294
	876	123	152	1151
11:00	185	20	30	235
11:15	214	18	38	270
11:30	185	25	34	244
11:45	196	33	35	264
	780	96	137	1013
Total	7629	670	933	9232
Percent	82.6%	7.3%	10.1%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
12 PM	175	19	33	227
12:15	194	20	35	249
12:30	196	29	30	255
12:45	199	21	32	252
	764	89	130	983
13:00	183	26	35	244
13:15	196	17	31	244
13:30	216	31	31	278
13:45	207	21	36	264
	802	95	133	1030
14:00	213	22	35	270
14:15	241	33	44	318
14:30	250	29	24	303
14:45	246	34	34	314
	950	118	137	1205
15:00	223	30	29	282
15:15	224	34	25	283
15:30	229	24	26	279
15:45	204	23	21	248
	880	111	101	1092
16:00	255	23	23	301
16:15	220	19	28	267
16:30	225	14	20	259
16:45	229	22	29	280
	929	78	100	1107
17:00	242	26	7	275
17:15	252	21	18	291
17:30	267	18	27	312
17:45	243	22	25	290
	1004	87	77	1168
18:00	237	19	16	272
18:15	221	14	18	253
18:30	191	17	16	224
18:45	185	16	20	221
	834	66	70	970
19:00	177	11	14	202
19:15	147	11	17	175
19:30	165	13	15	193
19:45	180	11	18	209
	669	46	64	779
20:00	161	7	12	180
20:15	161	7	23	191
20:30	122	7	11	140
20:45	109	8	14	131
	553	29	60	642
21:00	117	4	17	138
21:15	131	3	6	140
21:30	115	8	10	133
21:45	115	5	18	138
	478	20	51	549
22:00	114	0	6	120
22:15	101	6	11	118
22:30	137	1	7	145
22:45	177	7	13	197
	529	14	37	580
23:00	105	3	13	121
23:15	88	6	7	101
23:30	98	2	3	103
23:45	64	2	11	77
	355	13	34	402
Total	8747	766	994	10507
Percent	83.2%	7.3%	9.5%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

Start Time	Lights	Mediums	Trucks	Total
05/06/21	54	8	10	72
00:15	58	3	6	67
00:30	67	4	12	83
00:45	57	6	4	67
	236	21	32	289
01:00	54	3	11	68
01:15	42	4	3	49
01:30	35	2	8	45
01:45	40	6	6	52
	171	15	28	214
02:00	28	3	8	39
02:15	35	0	9	44
02:30	49	2	11	62
02:45	55	4	7	66
	167	9	35	211
03:00	35	3	7	45
03:15	59	3	8	70
03:30	49	9	4	62
03:45	68	2	11	81
	211	17	30	258
04:00	55	3	9	67
04:15	74	3	9	86
04:30	94	6	5	105
04:45	131	8	7	146
	354	20	30	404
05:00	104	8	12	124
05:15	119	6	9	134
05:30	205	11	19	235
05:45	288	8	12	308
	716	33	52	801
06:00	216	11	13	240
06:15	242	11	19	272
06:30	331	21	14	366
06:45	440	14	22	476
	1229	57	68	1354
07:00	304	16	23	343
07:15	248	26	24	298
07:30	273	26	24	323
07:45	292	27	21	340
	1117	95	92	1304
08:00	305	11	30	346
08:15	257	23	23	303
08:30	218	18	20	256
08:45	273	29	34	336
	1053	81	107	1241
09:00	250	18	36	304
09:15	174	25	32	231
09:30	207	46	40	293
09:45	213	45	38	296
	844	134	146	1124
10:00	177	33	40	250
10:15	162	30	49	241
10:30	200	26	47	273
10:45	167	21	34	222
	706	110	170	986
11:00	149	18	33	200
11:15	171	27	39	237
11:30	170	28	28	226
11:45	193	37	35	265
	683	110	135	928
Total	7487	702	925	9114
Percent	82.1%	7.7%	10.1%	100.0%

All Traffic Data Services

www.alltrafficdata.net

Site Code: 3
Station ID: 3
FULTON IND BLVD NORTH OF MENDEL DRIVE

Latitude: 0' 0.0000 Undefined
Longitude: 0' 0.0000 Undefined

SB

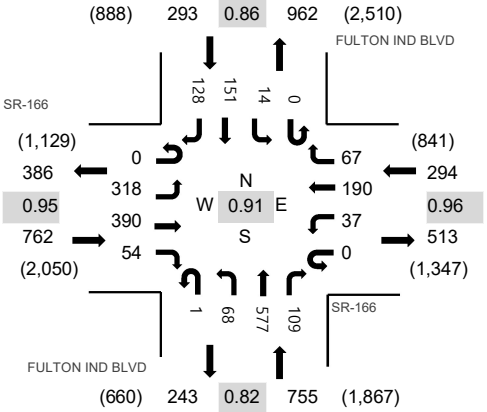
Start Time	Lights	Mediums	Trucks	Total
12 PM	195	36	42	273
12:15	220	26	30	276
12:30	198	21	24	243
12:45	231	24	31	286
	844	107	127	1078
13:00	211	33	45	289
13:15	223	23	36	282
13:30	263	39	29	331
13:45	247	33	48	328
	944	128	158	1230
14:00	227	31	28	286
14:15	244	31	36	311
14:30	220	24	29	273
14:45	253	22	38	313
	944	108	131	1183
15:00	207	17	30	254
15:15	199	22	29	250
15:30	236	32	24	292
15:45	201	16	23	240
	843	87	106	1036
16:00	237	26	24	287
16:15	260	23	16	299
16:30	265	24	25	314
16:45	232	25	29	286
	994	98	94	1186
17:00	228	21	21	270
17:15	261	27	20	308
17:30	242	16	24	282
17:45	207	13	21	241
	938	77	86	1101
18:00	238	13	22	273
18:15	269	15	16	300
18:30	191	10	30	231
18:45	177	18	10	205
	875	56	78	1009
19:00	187	17	15	219
19:15	184	11	18	213
19:30	186	12	15	213
19:45	189	13	19	221
	746	53	67	866
20:00	300	12	31	343
20:15	200	8	17	225
20:30	167	10	14	191
20:45	165	3	10	178
	832	33	72	937
21:00	110	4	6	120
21:15	123	8	8	139
21:30	123	2	15	140
21:45	123	7	10	140
	479	21	39	539
22:00	104	5	5	114
22:15	140	3	7	150
22:30	132	8	10	150
22:45	155	7	15	177
	531	23	37	591
23:00	99	4	11	114
23:15	82	7	11	100
23:30	81	1	7	89
23:45	86	4	10	100
	348	16	39	403
Total	9318	807	1034	11159
Percent	83.5%	7.2%	9.3%	100.0%
Grand Total	33181	2945	3886	40012
Percent	82.9%	7.4%	9.7%	100.0%

Turning Movement Counts (All Traffic Data)

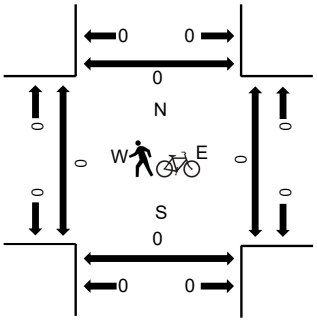
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #1 FULTON IND BLVD & SR-166 AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SR-166 Eastbound				SR-166 Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	97	105	8	0	5	38	15	0	7	117	18	0	1	13	24	448	1,939	0	0	0	0
6:45 AM	0	119	90	6	0	5	44	19	0	15	143	16	0	2	35	36	530	2,072	0	0	0	0
7:00 AM	0	78	94	13	0	4	37	15	0	14	125	17	0	8	35	39	479	2,094	0	0	0	0
7:15 AM	0	81	111	12	0	7	44	12	0	14	118	20	0	3	32	28	482	2,104	0	0	0	0
7:30 AM	0	76	94	20	0	8	46	26	0	24	179	28	0	4	36	40	581	2,090	0	0	0	0
7:45 AM	0	102	100	12	0	12	44	15	1	18	148	27	0	4	35	34	552	1,969	0	0	0	0
8:00 AM	0	59	85	10	0	10	56	14	0	12	132	34	0	3	48	26	489	1,795	0	0	0	0
8:15 AM	0	99	85	8	0	16	49	11	0	12	86	25	0	10	37	30	468	1,699	0	0	0	0
8:30 AM	0	63	77	9	0	14	29	10	0	12	150	27	0	1	47	21	460	1,617	0	0	0	0
8:45 AM	0	53	69	2	0	10	51	17	0	11	82	8	0	12	35	28	378		0	0	0	0
9:00 AM	0	42	64	4	0	10	66	6	0	20	83	11	0	4	43	40	393		0	0	0	0
9:15 AM	0	27	66	10	0	4	65	7	0	12	84	17	0	7	44	43	386		0	0	0	0

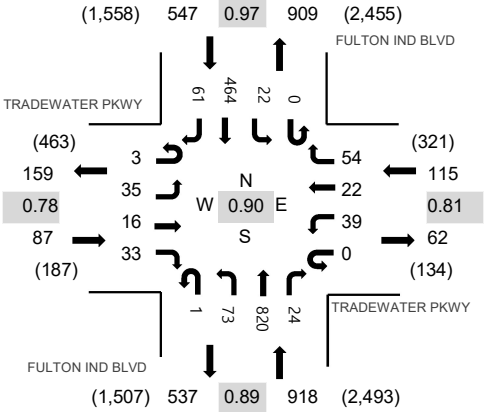
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	6	7	2	0	0	5	5	0	0	17	0	0	3	17	7	69
Lights	0	310	369	49	0	36	177	58	1	68	547	106	0	9	120	115	1,965
Mediums	0	2	14	3	0	1	8	4	0	0	13	3	0	2	14	6	70
Total	0	318	390	54	0	37	190	67	1	68	577	109	0	14	151	128	2,104

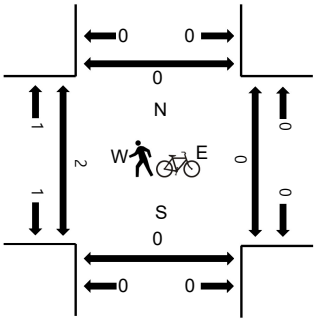
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #2 FULTON IND BLVD & TRADEWATER PKWY AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	TRADEWATER PKWY Eastbound				TRADEWATER PKWY Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	1	4	0	1	0	7	15	7	0	31	181	1	0	2	74	11	335	1,541	0	0	0	0
6:45 AM	0	10	1	6	0	10	18	11	0	49	207	2	0	6	133	14	467	1,641	0	0	0	0
7:00 AM	2	6	1	5	0	12	10	10	0	21	172	3	1	4	119	15	381	1,637	1	0	0	0
7:15 AM	0	8	2	5	0	4	12	9	0	14	193	3	1	4	87	16	358	1,650	2	0	0	0
7:30 AM	0	16	9	6	0	12	6	12	0	18	221	5	0	7	109	14	435	1,667	0	0	0	0
7:45 AM	2	12	4	13	0	13	7	15	1	36	216	4	0	2	116	22	463	1,606	0	0	0	0
8:00 AM	0	5	3	12	0	5	6	14	0	14	184	10	0	5	116	20	394	1,477	0	0	0	0
8:15 AM	1	2	0	2	0	9	3	13	0	5	199	5	0	8	123	5	375	1,395	2	0	0	0
8:30 AM	0	2	0	8	0	7	2	11	3	2	212	7	3	3	108	6	374	1,351	0	0	0	0
8:45 AM	0	7	0	3	0	10	1	12	1	9	167	4	4	3	107	6	334		0	0	0	0
9:00 AM	1	11	3	1	0	5	3	7	0	5	132	4	3	9	117	11	312		3	0	0	0
9:15 AM	0	7	2	3	0	10	6	7	0	9	140	3	1	5	124	14	331		0	0	0	0

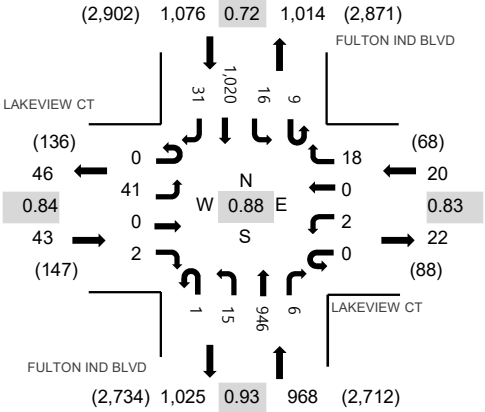
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	9	0	5	0	0	0	1	0	6	54	2	0	0	52	11	140
Lights	3	23	16	19	0	36	22	52	1	66	720	19	0	22	372	46	1,417
Mediums	0	3	0	9	0	3	0	1	0	1	46	3	0	0	40	4	110
Total	3	35	16	33	0	39	22	54	1	73	820	24	0	22	464	61	1,667

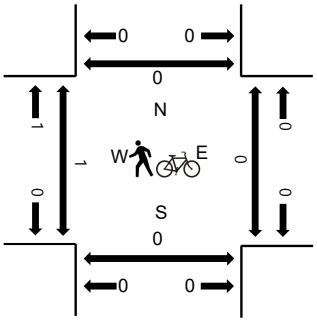
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #3 FULTON IND BLVD & LAKEVIEW CT AM
Date: Wednesday, May 5, 2021
Peak Hour: 06:45 AM - 07:45 AM
Peak 15-Minutes: 06:45 AM - 07:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAKEVIEW CT Eastbound				LAKEVIEW CT Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	9	0	2	0	1	0	6	0	1	196	2	1	4	224	5	451	2,007	0	0	0	0
6:45 AM	0	5	0	1	0	0	0	3	0	3	210	1	7	3	352	13	598	2,107	0	0	0	0
7:00 AM	0	6	0	0	0	0	0	6	0	2	235	2	0	1	245	9	506	2,078	0	0	0	0
7:15 AM	0	12	0	0	0	0	0	4	1	6	236	1	0	6	184	2	452	2,056	0	0	0	0
7:30 AM	0	18	0	1	0	2	0	5	0	4	265	2	2	6	239	7	551	2,075	1	0	0	0
7:45 AM	0	14	0	1	0	0	0	2	0	3	271	2	1	6	267	2	569	1,977	0	0	0	0
8:00 AM	0	14	0	0	0	0	0	4	1	3	207	1	4	9	233	8	484	1,876	0	0	0	0
8:15 AM	0	13	0	3	0	0	0	8	1	3	209	2	1	6	215	10	471	1,791	0	0	0	0
8:30 AM	0	11	0	1	0	0	0	8	1	6	223	0	2	7	190	4	453	1,747	0	0	0	0
8:45 AM	0	9	0	1	0	1	0	6	2	4	221	3	7	6	194	14	468		0	0	0	0
9:00 AM	0	9	0	4	0	0	0	10	0	2	180	2	1	7	175	9	399		0	0	0	0
9:15 AM	0	13	0	0	0	0	0	2	0	2	194	2	1	7	192	14	427		0	0	0	0

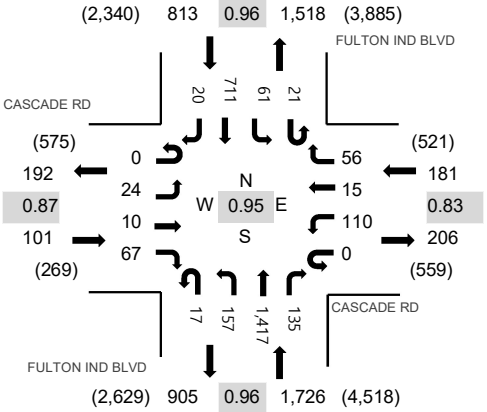
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	22	0	1	0	1	0	2	0	2	80	0	1	2	93	14	218
Lights	0	10	0	1	0	1	0	15	1	11	810	6	7	14	881	16	1,773
Mediums	0	9	0	0	0	0	0	1	0	2	56	0	1	0	46	1	116
Total	0	41	0	2	0	2	0	18	1	15	946	6	9	16	1,020	31	2,107

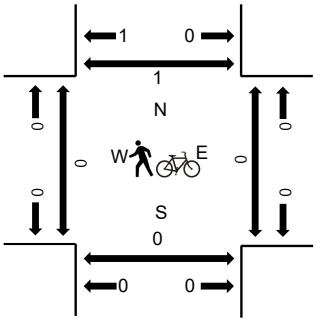
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #4 FULTON IND BLVD & CASCADE RD AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CASCADE RD Eastbound				CASCADE RD Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	6	0	16	0	21	5	9	3	60	267	32	6	16	127	4	572	2,601	0	0	0	0
6:45 AM	0	4	0	10	0	32	4	4	5	62	305	31	5	19	201	8	690	2,748	0	0	0	0
7:00 AM	0	6	1	24	0	28	3	11	4	49	331	28	4	9	158	4	660	2,802	0	0	0	0
7:15 AM	0	12	3	14	0	23	4	15	5	42	358	27	3	11	155	7	679	2,821	0	0	0	0
7:30 AM	0	0	4	24	0	32	4	13	7	46	360	33	6	19	168	3	719	2,808	0	0	0	0
7:45 AM	0	5	2	13	0	33	4	15	1	41	372	40	5	19	188	6	744	2,673	0	0	0	0
8:00 AM	0	7	1	16	0	22	3	13	4	28	327	35	7	12	200	4	679	2,513	0	0	0	1
8:15 AM	0	3	1	8	0	43	2	15	2	32	314	26	4	14	201	1	666	2,359	0	0	0	2
8:30 AM	0	4	2	18	0	24	3	12	5	33	280	33	4	13	148	5	584	2,239	0	2	0	1
8:45 AM	0	3	0	12	0	24	2	6	10	32	279	28	6	15	161	6	584		1	0	1	0
9:00 AM	0	6	4	15	0	30	6	11	4	30	218	32	8	13	145	3	525		0	0	0	0
9:15 AM	0	7	3	15	0	31	2	12	5	19	210	23	7	10	194	8	546		0	0	0	0

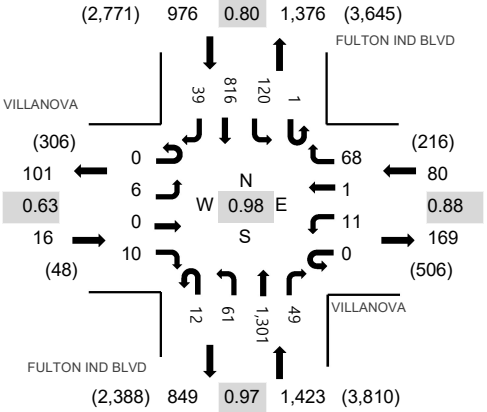
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	0	6	0	2	0	0	0	13	79	2	0	0	73	2	178
Lights	0	21	9	48	0	96	15	53	17	139	1,266	130	21	56	587	18	2,476
Mediums	0	2	1	13	0	12	0	3	0	5	72	3	0	5	51	0	167
Total	0	24	10	67	0	110	15	56	17	157	1,417	135	21	61	711	20	2,821

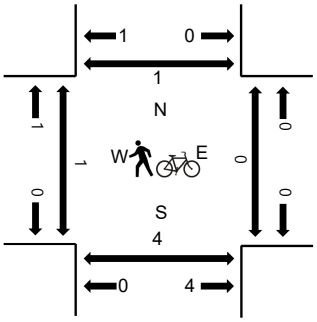
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #5 FULTON IND BLVD & VILLANOVA AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	VILLANOVA Eastbound				VILLANOVA Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	1	0	2	0	2	0	12	2	19	255	10	0	28	150	6	487	2,327	0	0	0	0
6:45 AM	0	1	0	2	0	3	0	12	2	38	251	13	1	51	238	19	631	2,476	0	0	0	0
7:00 AM	0	2	0	2	0	1	0	16	0	12	330	10	0	42	181	15	611	2,484	0	0	1	0
7:15 AM	0	1	0	2	0	2	0	23	2	18	337	12	0	19	167	15	598	2,491	0	0	2	0
7:30 AM	0	2	0	0	0	2	0	21	3	18	337	8	0	29	208	8	636	2,495	1	0	3	0
7:45 AM	0	2	0	3	0	1	1	15	5	15	346	12	0	37	192	10	639	2,364	0	0	1	0
8:00 AM	0	2	0	3	0	6	0	17	2	16	322	12	1	26	205	6	618	2,259	0	0	0	0
8:15 AM	0	0	0	4	0	2	0	15	2	12	296	17	0	28	211	15	602	2,149	0	0	0	1
8:30 AM	0	0	0	5	0	3	0	7	4	11	272	13	0	25	163	2	505	2,023	0	0	0	0
8:45 AM	0	1	0	2	0	3	0	16	4	5	271	10	0	23	188	11	534		0	0	0	0
9:00 AM	0	2	0	6	0	5	0	14	6	9	225	21	0	21	184	15	508		0	0	0	0
9:15 AM	0	1	0	2	0	3	0	14	5	3	204	13	0	26	198	7	476		0	0	0	0

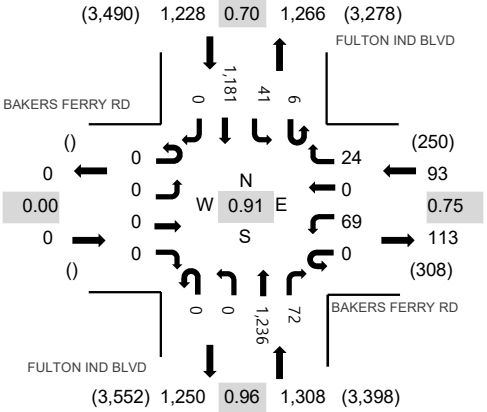
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	3	0	2	0	6	1	1	79	5	0	4	81	8	190
Lights	0	5	0	4	0	9	1	48	10	59	1,145	44	1	109	686	28	2,149
Mediums	0	1	0	3	0	0	0	14	1	1	77	0	0	7	49	3	156
Total	0	6	0	10	0	11	1	68	12	61	1,301	49	1	120	816	39	2,495

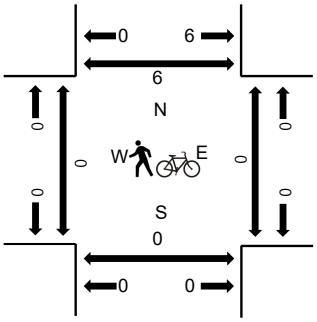
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #6 FULTON IND BLVD & BAKERS FERRY RD AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BAKERS FERRY RD Eastbound				BAKERS FERRY RD Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	0	0	0	0	13	0	3	0	0	217	13	0	10	274	0	530	2,443	0	0	0	2
6:45 AM	0	0	0	0	0	31	0	4	0	0	185	19	1	16	436	0	692	2,552	0	0	0	2
7:00 AM	0	0	0	0	0	13	0	6	1	0	289	25	0	11	240	0	585	2,584	0	0	0	0
7:15 AM	0	0	0	0	0	16	0	10	0	0	316	22	0	7	265	0	636	2,629	0	0	0	3
7:30 AM	0	0	0	0	0	21	0	4	0	0	313	13	2	11	275	0	639	2,566	0	0	0	2
7:45 AM	0	0	0	0	0	17	0	8	0	0	329	17	1	12	340	0	724	2,494	0	0	0	0
8:00 AM	0	0	0	0	0	15	0	2	0	0	278	20	3	11	301	0	630	2,308	0	0	0	1
8:15 AM	0	0	0	0	0	18	0	7	0	0	287	20	1	14	226	0	573	2,195	0	0	0	1
8:30 AM	0	0	0	0	0	11	0	6	0	0	276	12	0	6	256	0	567	2,129	0	0	0	1
8:45 AM	0	0	0	0	0	13	0	6	0	0	264	16	0	7	232	0	538		0	0	0	0
9:00 AM	0	0	0	0	0	11	0	1	1	0	240	7	1	4	252	0	517		0	0	0	0
9:15 AM	0	0	0	0	0	7	0	7	0	0	210	8	1	7	267	0	507		0	0	0	0

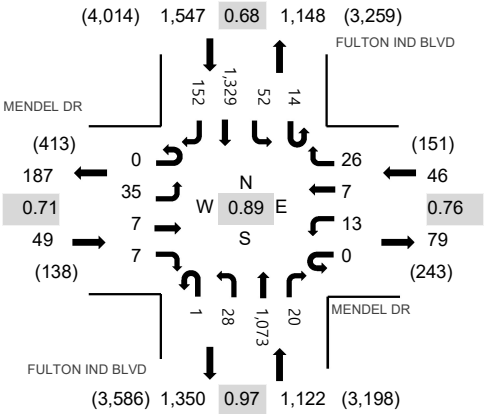
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	6	0	3	0	0	88	2	0	3	106	0	208
Lights	0	0	0	0	0	59	0	21	0	0	1,037	68	6	35	997	0	2,223
Mediums	0	0	0	0	0	4	0	0	0	0	111	2	0	3	78	0	198
Total	0	0	0	0	0	69	0	24	0	0	1,236	72	6	41	1,181	0	2,629

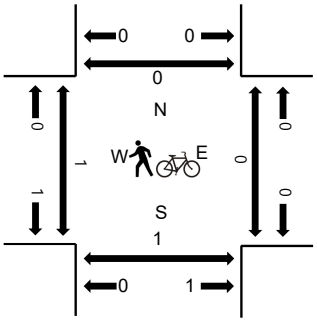
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #7 FULTON IND BLVD & MENDEL DR AM
Date: Wednesday, May 5, 2021
Peak Hour: 06:45 AM - 07:45 AM
Peak 15-Minutes: 06:45 AM - 07:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MENDEL DR Eastbound				MENDEL DR Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	12	0	2	0	1	1	4	0	7	184	3	0	9	281	26	530	2,575	0	0	0	0
6:45 AM	0	14	3	1	0	5	1	6	0	12	165	2	3	12	475	76	775	2,764	0	0	0	0
7:00 AM	0	11	2	0	0	4	5	4	1	9	289	4	7	9	263	29	637	2,667	0	0	0	0
7:15 AM	0	4	0	2	0	0	0	11	0	4	307	5	2	11	260	27	633	2,719	0	0	1	0
7:30 AM	0	6	2	4	0	4	1	5	0	3	312	9	2	20	331	20	719	2,684	0	0	0	0
7:45 AM	0	5	0	2	0	3	0	8	1	3	301	11	1	12	309	22	678	2,521	0	0	0	3
8:00 AM	0	14	1	0	0	13	0	8	1	7	264	11	2	19	325	24	689	2,415	0	0	0	0
8:15 AM	0	8	0	3	0	4	0	8	0	8	279	3	2	12	247	24	598	2,295	0	0	0	0
8:30 AM	0	5	0	1	0	3	1	7	1	9	254	8	6	9	236	16	556	2,242	0	0	0	0
8:45 AM	0	5	0	2	0	6	3	11	0	6	245	9	2	10	245	28	572		0	0	0	0
9:00 AM	0	12	0	2	0	2	2	7	0	4	231	9	3	9	270	18	569		0	0	0	0
9:15 AM	0	8	1	6	0	5	0	8	1	3	203	10	4	18	264	14	545		0	0	0	0

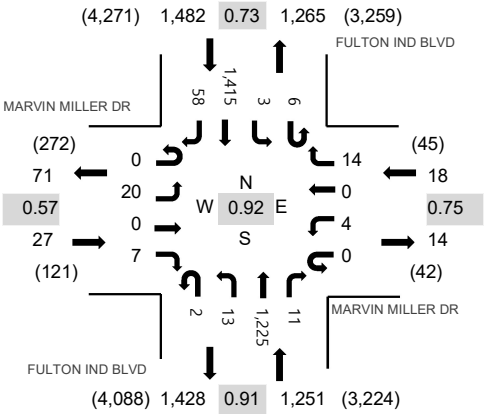
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	0	0	0	2	0	5	0	1	71	1	2	5	90	5	184
Lights	0	25	7	6	0	9	7	16	1	26	921	17	11	40	1,167	142	2,395
Mediums	0	8	0	1	0	2	0	5	0	1	81	2	1	7	72	5	185
Total	0	35	7	7	0	13	7	26	1	28	1,073	20	14	52	1,329	152	2,764

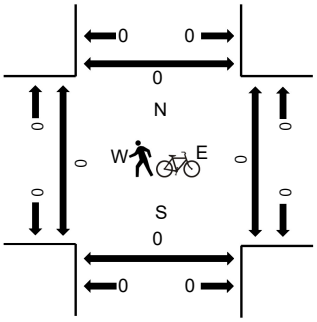
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #8 FULTON IND BLVD & MARVIN MILLER DR AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARVIN MILLER DR Eastbound				MARVIN MILLER DR Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	1	0	1	0	0	0	4	2	0	184	2	0	5	341	7	547	2,562	0	0	0	0
6:45 AM	0	1	0	0	0	2	0	0	0	2	189	1	0	0	540	8	743	2,769	0	0	0	0
7:00 AM	0	0	0	1	0	0	0	3	3	0	296	2	0	0	323	5	633	2,735	0	0	0	0
7:15 AM	0	1	0	1	0	1	0	3	1	1	305	1	1	2	313	9	639	2,778	0	0	0	0
7:30 AM	0	2	0	2	0	2	0	4	1	3	338	4	0	1	384	13	754	2,749	0	0	0	0
7:45 AM	0	4	0	0	0	0	0	3	0	3	301	1	1	0	377	19	709	2,567	0	0	0	0
8:00 AM	0	13	0	4	0	1	0	4	0	6	281	5	4	0	341	17	676	2,464	0	0	0	0
8:15 AM	0	4	0	2	0	1	0	1	0	12	286	2	1	1	286	14	610	2,394	0	0	0	0
8:30 AM	0	6	0	2	0	1	0	2	0	5	254	2	1	0	272	27	572	2,350	0	0	0	0
8:45 AM	0	9	0	5	0	1	0	2	1	11	246	2	0	2	285	42	606		0	0	0	0
9:00 AM	0	20	0	5	0	0	0	6	1	12	220	5	2	0	291	44	606		0	0	0	0
9:15 AM	0	24	0	13	0	0	0	4	2	5	225	1	3	3	279	7	566		0	1	0	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	2	0	3	1	1	97	1	0	1	120	1	227
Lights	0	19	0	5	0	0	0	4	1	11	1,016	3	6	0	1,207	53	2,325
Mediums	0	1	0	2	0	2	0	7	0	1	112	7	0	2	88	4	226
Total	0	20	0	7	0	4	0	14	2	13	1,225	11	6	3	1,415	58	2,778

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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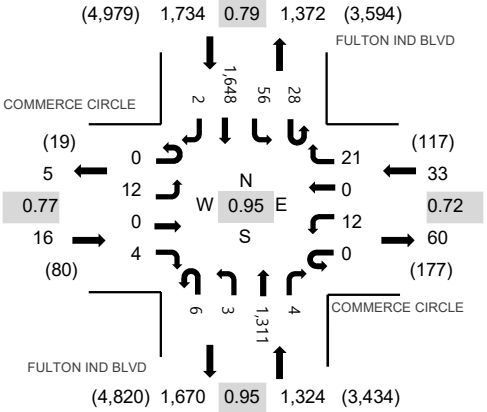
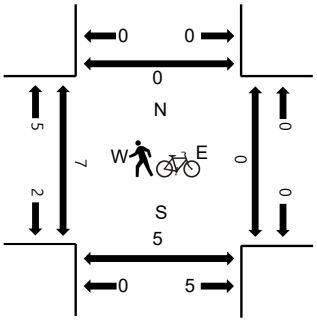
Location: #9 FULTON IND BLVD & COMMERCE CIRCLE AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	COMMERCE CIRCLE Eastbound				COMMERCE CIRCLE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	7	0	0	0	3	1	6	1	0	194	2	4	6	471	0	695	2,972	0	0	0	0
6:45 AM	0	3	2	1	0	3	0	9	0	0	205	1	2	18	572	0	816	3,054	1	1	3	0
7:00 AM	0	4	0	2	0	3	1	11	2	0	307	1	3	5	362	0	701	3,059	1	0	0	1
7:15 AM	0	3	0	0	0	1	0	4	3	0	328	0	9	13	399	0	760	3,107	0	0	0	0
7:30 AM	0	6	0	2	0	4	0	3	0	3	345	2	4	9	398	1	777	3,010	3	0	2	0
7:45 AM	0	3	0	2	0	1	0	5	2	0	324	2	7	19	456	0	821	2,932	1	0	1	0
8:00 AM	0	0	0	0	0	6	0	9	1	0	314	0	8	15	395	1	749	2,762	3	0	2	0
8:15 AM	0	7	1	0	0	4	0	11	2	0	303	2	3	18	310	2	663	2,654	0	1	2	0
8:30 AM	0	8	0	4	0	1	1	3	2	0	287	0	7	17	368	1	699	2,628	0	0	1	0
8:45 AM	0	9	0	0	0	0	0	6	3	0	276	0	4	13	339	1	651		1	0	2	0
9:00 AM	0	5	1	1	0	5	0	5	2	0	252	3	4	16	347	0	641		3	1	1	0
9:15 AM	0	7	0	2	0	8	0	3	4	2	258	1	9	10	328	5	637		1	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	1	0	0	0	0	110	0	0	1	134	0	246
Lights	0	11	0	4	0	10	0	19	6	3	1,050	4	27	53	1,425	2	2,614
Mediums	0	1	0	0	0	1	0	2	0	0	151	0	1	2	89	0	247
Total	0	12	0	4	0	12	0	21	6	3	1,311	4	28	56	1,648	2	3,107

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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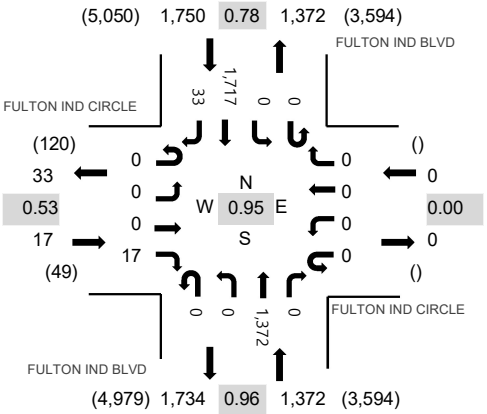
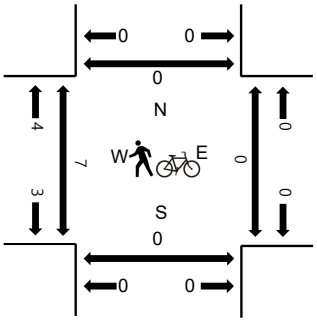
Location: #10 FULTON IND BLVD & FULTON IND CIRCLE AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	FULTON IND CIRCLE Eastbound				FULTON IND CIRCLE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	0	0	4	0	0	0	0	0	0	211	0	0	0	477	15	707	3,008	0	0	0	1
6:45 AM	0	0	0	1	0	0	0	0	0	0	219	0	0	0	591	14	825	3,080	1	1	0	0
7:00 AM	0	0	0	3	0	0	0	0	0	0	325	0	0	0	367	9	704	3,083	1	1	1	0
7:15 AM	0	0	0	7	0	0	0	0	0	0	344	0	0	0	414	7	772	3,139	1	0	0	0
7:30 AM	0	0	0	4	0	0	0	0	0	0	358	0	0	0	408	9	779	3,029	3	0	0	0
7:45 AM	0	0	0	4	0	0	0	0	0	0	339	0	0	0	478	7	828	2,957	0	0	0	0
8:00 AM	0	0	0	2	0	0	0	0	0	0	331	0	0	0	417	10	760	2,793	3	0	0	0
8:15 AM	0	0	0	5	0	0	0	0	0	0	324	0	0	0	328	5	662	2,673	0	1	0	0
8:30 AM	0	0	0	5	0	0	0	0	0	0	305	0	0	0	388	9	707	2,656	0	0	0	0
8:45 AM	0	0	0	3	0	0	0	0	0	0	295	0	0	0	354	12	664		0	1	0	0
9:00 AM	0	0	0	2	0	0	0	0	0	0	266	0	0	0	365	7	640		2	1	0	0
9:15 AM	0	0	0	9	0	0	0	0	0	0	277	0	0	0	343	16	645		0	1	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	110	0	0	0	135	0	245
Lights	0	0	0	17	0	0	0	0	0	0	1,107	0	0	0	1,490	32	2,646
Mediums	0	0	0	0	0	0	0	0	0	0	155	0	0	0	92	1	248
Total	0	0	0	17	0	0	0	0	0	0	1,372	0	0	0	1,717	33	3,139

ALL TRAFFIC DATA SERVICES
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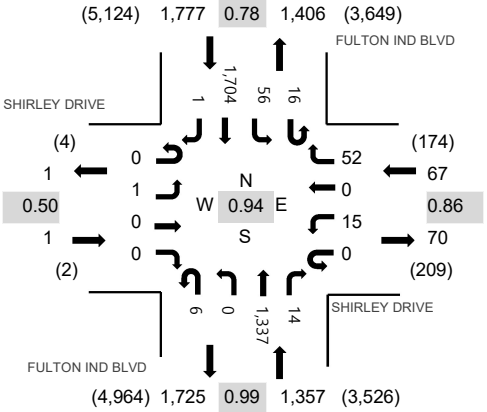
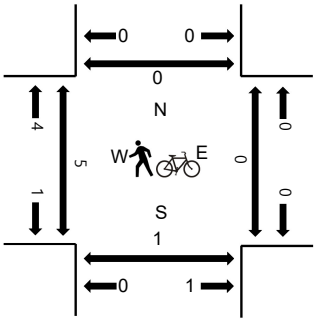
Location: #11 FULTON IND BLVD & SHIRLEY DRIVE AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SHIRLEY DRIVE Eastbound				SHIRLEY DRIVE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	0	0	0	0	3	0	8	0	0	197	4	0	14	480	1	707	3,036	1	0	0	0
6:45 AM	0	0	0	0	0	8	0	10	0	0	215	5	2	35	578	0	853	3,123	0	0	0	0
7:00 AM	0	1	0	0	0	2	0	10	0	0	300	1	1	14	370	1	700	3,125	0	0	0	0
7:15 AM	0	0	0	0	0	5	0	15	2	0	327	8	2	13	404	0	776	3,202	0	0	0	0
7:30 AM	0	0	0	0	0	5	0	14	0	0	337	2	6	11	419	0	794	3,119	3	0	1	0
7:45 AM	0	1	0	0	0	3	0	10	1	0	340	1	2	17	479	1	855	3,038	0	0	0	0
8:00 AM	0	0	0	0	0	2	0	13	3	0	333	3	6	15	402	0	777	2,836	2	0	0	0
8:15 AM	0	0	0	0	0	2	0	12	1	0	315	2	3	10	348	0	693	2,721	2	3	1	1
8:30 AM	0	0	0	0	0	3	0	12	0	0	298	4	3	13	380	0	713	2,671	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	8	0	0	286	1	3	15	340	0	653		0	0	0	0
9:00 AM	0	0	0	0	0	3	0	15	1	0	263	3	2	10	365	0	662		1	0	0	0
9:15 AM	0	0	0	0	0	4	0	7	2	1	270	0	2	8	349	0	643		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	8	0	0	109	0	0	3	129	0	249
Lights	0	0	0	0	0	15	0	36	6	0	1,078	11	9	52	1,481	0	2,688
Mediums	0	1	0	0	0	0	0	8	0	0	150	3	7	1	94	1	265
Total	0	1	0	0	0	15	0	52	6	0	1,337	14	16	56	1,704	1	3,202

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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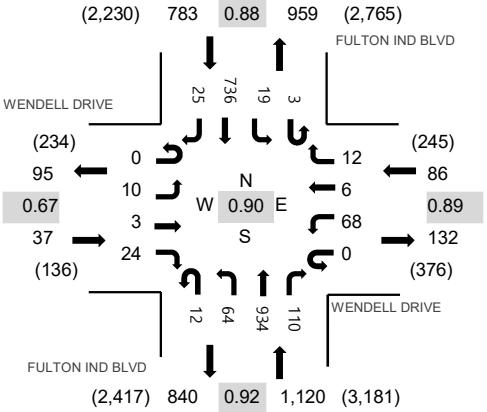
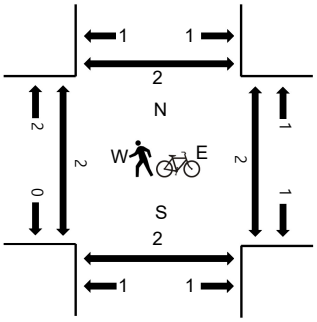
Location: #12 FULTON IND BLVD & WENDELL DRIVE AM
Date: Wednesday, May 5, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	WENDELL DRIVE Eastbound				WENDELL DRIVE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:30 AM	0	3	6	6	0	12	4	3	0	7	190	23	0	7	193	1	455	1,873	0	0	0	3
6:45 AM	0	5	4	3	0	17	6	2	3	25	206	20	0	5	200	7	503	1,933	0	3	0	0
7:00 AM	0	1	3	9	0	14	4	2	2	19	189	29	0	9	135	6	422	1,990	0	0	0	2
7:15 AM	0	1	0	5	0	15	0	2	5	21	216	33	1	3	184	7	493	2,026	0	0	0	0
7:30 AM	0	1	3	6	0	21	1	1	2	14	249	31	0	6	171	9	515	2,020	0	0	0	2
7:45 AM	0	4	0	6	0	15	3	2	1	19	262	25	2	6	209	6	560	1,995	2	0	1	0
8:00 AM	0	4	0	7	0	17	2	7	4	10	207	21	0	4	172	3	458	1,937	0	2	1	0
8:15 AM	0	1	2	8	0	16	2	6	6	10	242	24	0	4	164	2	487	1,928	1	3	0	0
8:30 AM	0	3	3	7	0	16	0	1	7	8	237	20	0	1	184	3	490	1,899	1	1	0	0
8:45 AM	0	2	1	10	0	12	0	0	4	9	271	23	1	5	162	2	502		2	0	3	0
9:00 AM	0	2	1	1	0	9	1	2	4	8	215	24	0	4	174	4	449		0	0	2	0
9:15 AM	0	2	6	10	0	21	2	7	1	5	213	17	0	3	167	4	458		0	0	1	0

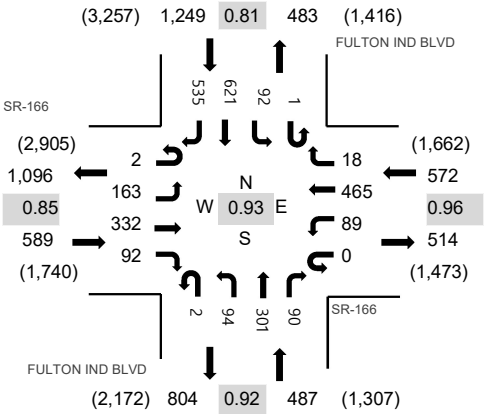
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	3	0	0	0	1	42	1	0	0	34	0	81
Lights	0	10	3	21	0	57	5	12	12	56	842	103	3	19	651	23	1,817
Mediums	0	0	0	3	0	8	1	0	0	7	50	6	0	0	51	2	128
Total	0	10	3	24	0	68	6	12	12	64	934	110	3	19	736	25	2,026

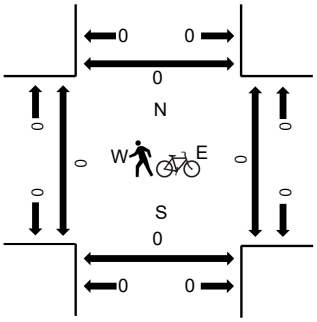
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #1 FULTON IND BLVD & SR-166 PM
Date: Wednesday, May 5, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SR-166 Eastbound				SR-166 Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	43	98	13	0	23	107	5	0	20	60	20	0	26	97	119	631	2,544	0	0	0	0
3:45 PM	1	56	83	16	0	34	91	5	1	11	71	25	0	23	119	88	624	2,594	0	0	0	0
4:00 PM	0	39	89	26	0	24	122	7	0	28	62	23	1	25	102	110	658	2,623	0	0	0	0
4:15 PM	0	44	68	21	0	26	107	13	0	9	65	12	0	19	145	102	631	2,746	0	0	0	0
4:30 PM	0	38	78	18	0	24	108	9	0	16	71	11	0	20	149	139	681	2,834	0	0	0	0
4:45 PM	0	45	74	25	0	21	119	6	0	11	62	15	0	11	148	116	653	2,873	0	0	0	0
5:00 PM	1	43	55	21	0	18	106	4	1	14	94	21	0	28	197	178	781	2,897	0	0	0	0
5:15 PM	0	35	84	19	0	31	124	6	0	20	63	21	0	31	153	132	719	2,741	0	0	0	0
5:30 PM	1	36	90	23	0	15	109	5	1	29	79	24	0	19	161	128	720	2,588	0	0	0	0
5:45 PM	0	49	103	29	0	25	126	3	0	31	65	24	1	14	110	97	677		0	0	0	0
6:00 PM	0	53	79	13	0	30	83	4	0	26	64	30	1	16	138	88	625		0	0	0	0
6:15 PM	0	44	73	14	0	18	99	5	0	17	60	30	0	11	123	72	566		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	8	2	0	0	0	8	1	0	2	17	1	0	11	17	12	79
Lights	2	151	327	90	0	89	454	16	2	88	271	87	1	78	586	514	2,756
Mediums	0	4	3	2	0	0	3	1	0	4	13	2	0	3	18	9	62
Total	2	163	332	92	0	89	465	18	2	94	301	90	1	92	621	535	2,897

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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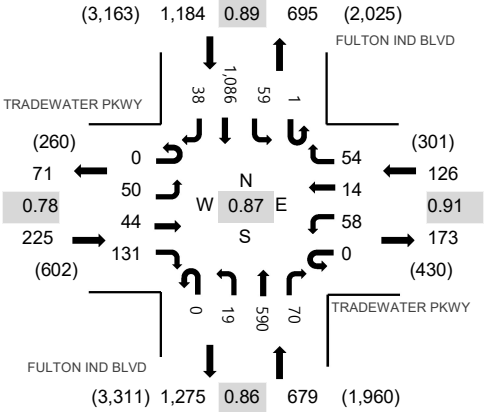
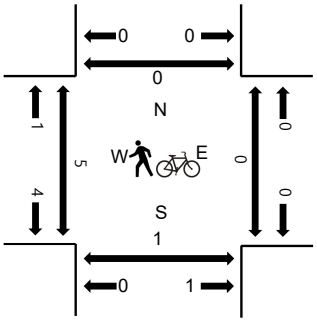
Location: #2 FULTON IND BLVD & TRADEWATER PKWY PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	TRADEWATER PKWY Eastbound				TRADEWATER PKWY Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	14	15	40	0	2	3	20	0	8	177	20	1	8	190	32	530	1,960	0	0	0	0
3:45 PM	0	8	3	22	0	3	5	6	1	8	156	10	0	14	202	19	457	1,963	0	0	0	0
4:00 PM	0	18	8	35	0	8	0	10	0	6	149	12	1	9	213	14	483	2,000	1	0	0	0
4:15 PM	0	11	5	23	0	9	2	18	0	3	146	13	2	6	236	16	490	2,150	0	0	0	0
4:30 PM	0	15	16	30	0	9	4	13	0	7	138	16	1	18	256	10	533	2,214	2	0	0	0
4:45 PM	0	17	7	19	0	6	3	16	0	5	143	20	0	12	237	9	494	2,213	1	0	1	0
5:00 PM	0	7	11	54	0	19	5	14	0	2	174	14	0	15	308	10	633	2,186	1	0	0	0
5:15 PM	0	11	10	28	0	24	2	11	0	5	135	20	0	14	285	9	554	1,983	1	0	0	0
5:30 PM	0	13	14	34	0	21	3	10	0	5	146	14	0	18	242	12	532	1,852	0	0	0	0
5:45 PM	0	6	6	24	0	9	9	12	0	10	115	4	0	13	248	11	467		0	0	0	0
6:00 PM	0	14	10	21	0	2	2	14	0	2	117	14	0	13	212	9	430		0	0	0	0
6:15 PM	0	10	10	13	0	2	1	4	0	5	131	9	1	9	224	4	423		0	0	0	0

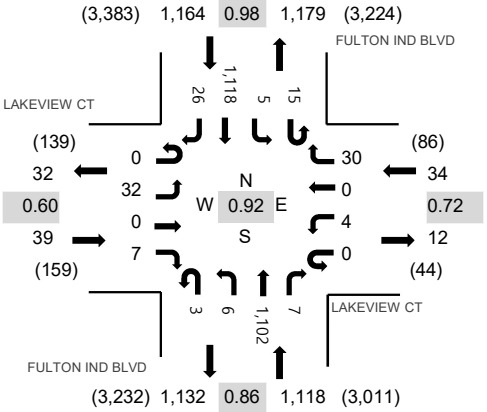
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	11	0	11	0	2	1	1	0	6	50	1	0	1	52	9	145
Lights	0	37	44	114	0	54	13	52	0	11	517	69	1	58	1,003	23	1,996
Mediums	0	2	0	6	0	2	0	1	0	2	23	0	0	0	31	6	73
Total	0	50	44	131	0	58	14	54	0	19	590	70	1	59	1,086	38	2,214

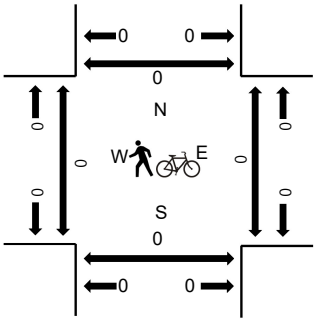
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #3 FULTON IND BLVD & LAKEVIEW CT PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAKEVIEW CT Eastbound				LAKEVIEW CT Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	28	0	2	0	0	0	3	1	4	321	1	6	2	276	9	653	2,292	0	0	0	0
3:45 PM	0	10	0	7	0	0	0	8	0	3	258	1	4	5	242	13	551	2,235	0	0	0	0
4:00 PM	0	16	0	1	0	0	0	4	0	1	254	0	7	4	261	6	554	2,248	0	0	0	0
4:15 PM	0	6	0	2	0	1	0	12	0	1	228	4	1	3	264	12	534	2,336	1	0	0	0
4:30 PM	0	8	0	2	0	2	0	13	1	0	295	1	4	1	266	3	596	2,355	0	0	0	0
4:45 PM	0	10	0	0	0	0	0	10	0	2	250	3	2	2	278	7	564	2,310	0	0	0	0
5:00 PM	0	6	0	2	0	2	0	3	0	4	317	3	4	2	292	7	642	2,261	0	0	0	0
5:15 PM	0	8	0	3	0	0	0	4	2	0	240	0	5	0	282	9	553	2,099	0	0	0	0
5:30 PM	0	11	0	2	0	1	0	3	1	1	231	0	4	2	287	8	551	1,992	0	0	0	0
5:45 PM	0	11	0	2	0	1	0	4	0	4	193	1	5	2	272	20	515		0	0	0	0
6:00 PM	0	12	0	2	0	0	0	4	0	5	192	1	3	3	249	9	480		0	0	0	0
6:15 PM	0	7	0	1	0	0	0	11	0	2	184	1	4	2	225	9	446		0	1	0	0

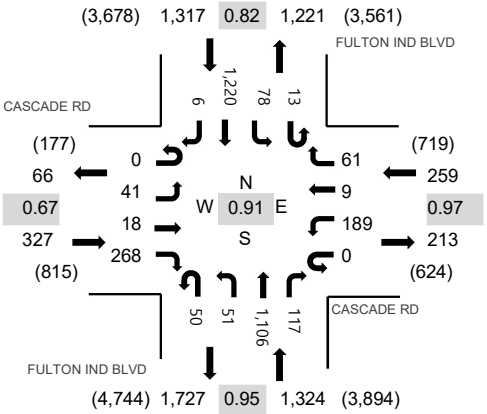
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	7	0	2	0	0	0	2	0	3	86	0	1	1	74	19	195
Lights	0	21	0	5	0	3	0	28	3	2	974	7	12	3	991	6	2,055
Mediums	0	4	0	0	0	1	0	0	0	1	42	0	2	1	53	1	105
Total	0	32	0	7	0	4	0	30	3	6	1,102	7	15	5	1,118	26	2,355

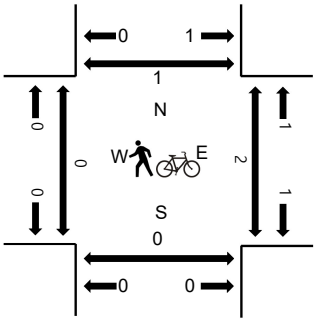
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #4 FULTON IND BLVD & CASCADE RD PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CASCADE RD Eastbound				CASCADE RD Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	7	4	62	0	57	0	12	15	8	308	30	2	16	312	0	833	3,175	0	0	0	0
3:45 PM	0	6	7	51	0	42	3	29	18	10	268	29	2	21	245	4	735	3,203	0	0	0	0
4:00 PM	0	14	4	76	0	58	1	11	12	8	273	31	5	20	378	0	891	3,227	0	1	0	0
4:15 PM	0	8	4	42	0	50	4	20	15	15	248	22	2	23	262	1	716	3,163	0	1	0	0
4:30 PM	0	15	9	104	0	48	1	9	14	14	300	32	3	19	290	3	861	3,187	0	0	0	1
4:45 PM	0	4	1	46	0	33	3	21	9	14	285	32	3	16	290	2	759	3,074	0	0	0	0
5:00 PM	0	12	8	89	0	39	2	10	19	12	272	34	5	16	306	3	827	2,991	0	0	0	0
5:15 PM	0	7	7	35	0	40	2	14	14	10	293	21	1	19	275	2	740	2,876	0	0	0	0
5:30 PM	0	11	7	67	0	38	1	15	16	9	256	29	3	16	278	2	748	2,744	0	0	0	3
5:45 PM	0	1	3	35	0	40	1	10	10	14	260	15	1	31	254	1	676		0	0	0	2
6:00 PM	0	6	5	27	0	50	4	14	11	11	276	29	1	19	257	2	712		0	2	0	1
6:15 PM	0	2	4	25	0	27	2	8	12	8	226	27	2	14	251	0	608		0	0	0	0

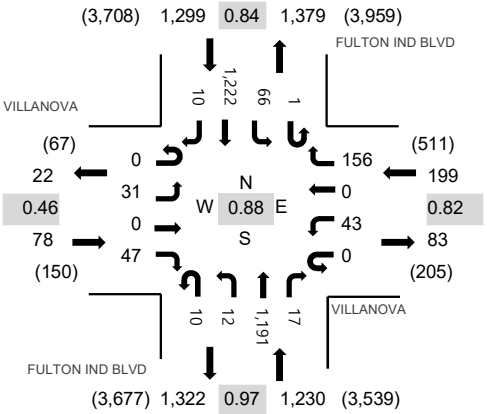
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	0	6	0	6	2	1	0	5	66	10	0	1	80	1	179
Lights	0	40	18	259	0	182	6	58	50	41	985	103	13	72	1,091	5	2,923
Mediums	0	0	0	3	0	1	1	2	0	5	55	4	0	5	49	0	125
Total	0	41	18	268	0	189	9	61	50	51	1,106	117	13	78	1,220	6	3,227

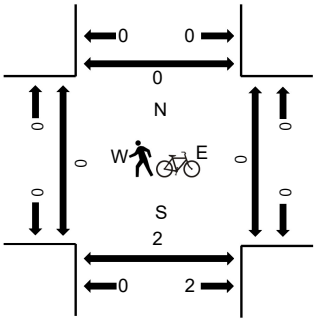
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #5 FULTON IND BLVD & VILLANOVA PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	VILLANOVA Eastbound				VILLANOVA Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	9	0	2	0	11	0	38	1	2	318	1	0	17	314	6	719	2,752	0	0	1	0
3:45 PM	0	7	0	2	0	4	0	27	2	5	285	6	0	16	258	3	615	2,749	1	0	0	1
4:00 PM	0	15	0	27	0	8	0	51	7	2	297	7	0	23	360	3	800	2,806	0	0	1	0
4:15 PM	0	2	0	5	0	5	0	31	2	5	266	4	0	13	282	3	618	2,710	0	0	0	0
4:30 PM	0	6	0	12	0	19	0	43	0	3	319	1	1	17	291	4	716	2,754	0	0	1	0
4:45 PM	0	8	0	3	0	11	0	31	1	2	309	5	0	13	289	0	672	2,667	0	0	0	0
5:00 PM	0	11	0	2	0	11	0	53	1	0	287	4	0	13	320	2	704	2,612	0	0	0	1
5:15 PM	0	7	0	1	0	6	0	35	3	1	311	1	0	8	283	6	662	2,539	0	0	0	0
5:30 PM	0	9	0	1	0	3	0	23	1	2	279	1	0	9	297	4	629	2,402	0	0	0	0
5:45 PM	0	6	0	2	0	5	0	35	2	4	254	6	0	17	281	5	617		0	0	0	0
6:00 PM	0	7	0	1	0	2	0	38	6	0	288	2	0	13	272	2	631		0	0	0	0
6:15 PM	0	5	0	0	0	5	0	16	1	2	232	1	0	7	255	1	525		1	0	0	0

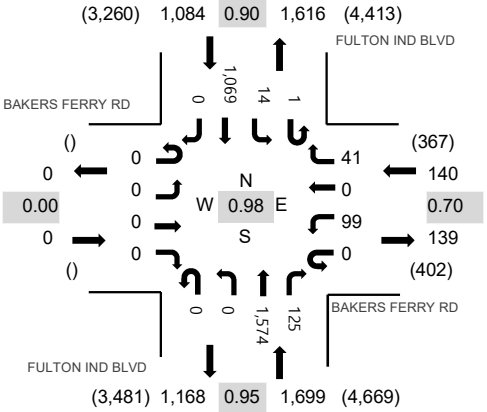
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	2	0	0	0	3	0	1	62	5	0	3	78	1	155
Lights	0	31	0	43	0	41	0	141	10	8	1,080	8	1	46	1,093	8	2,510
Mediums	0	0	0	2	0	2	0	12	0	3	49	4	0	17	51	1	141
Total	0	31	0	47	0	43	0	156	10	12	1,191	17	1	66	1,222	10	2,806

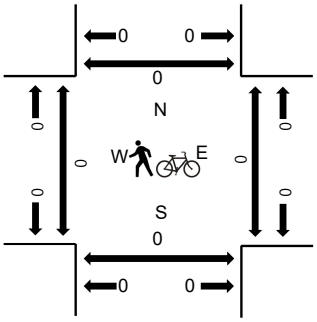
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #6 FULTON IND BLVD & BAKERS FERRY RD PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BAKERS FERRY RD Eastbound				BAKERS FERRY RD Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	0	0	0	0	21	0	11	0	0	425	32	3	5	273	0	770	2,857	0	0	0	0
3:45 PM	0	0	0	0	0	24	0	4	0	0	310	36	0	2	251	0	627	2,831	0	1	0	0
4:00 PM	0	0	0	0	0	44	0	8	0	0	387	35	0	5	308	0	787	2,922	0	0	0	0
4:15 PM	0	0	0	0	0	20	0	11	0	0	347	22	6	9	258	0	673	2,877	0	0	0	0
4:30 PM	0	0	0	0	0	24	0	11	0	0	413	35	0	1	260	0	744	2,923	0	0	0	0
4:45 PM	0	0	0	0	0	21	0	7	0	0	384	30	1	6	269	0	718	2,833	0	0	0	0
5:00 PM	0	0	0	0	0	31	0	11	0	0	399	32	0	4	265	0	742	2,779	0	0	0	0
5:15 PM	0	0	0	0	0	23	0	12	0	0	378	28	0	3	275	0	719	2,691	0	0	0	0
5:30 PM	0	0	0	0	0	15	0	3	0	0	328	24	1	4	279	0	654	2,516	0	0	0	0
5:45 PM	0	0	0	0	0	25	0	4	0	0	320	37	0	4	274	0	664		0	0	0	0
6:00 PM	0	0	0	0	0	17	0	4	0	0	336	28	1	0	268	0	654		0	0	0	0
6:15 PM	0	0	0	0	0	14	0	2	0	0	286	17	0	3	222	0	544		0	0	0	0

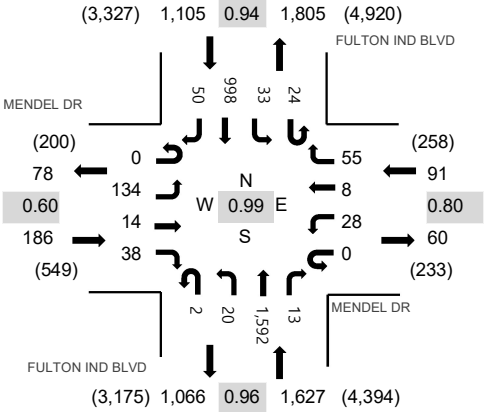
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	4	0	5	0	0	75	3	0	2	76	0	165
Lights	0	0	0	0	0	91	0	34	0	0	1,453	120	1	9	909	0	2,617
Mediums	0	0	0	0	0	4	0	2	0	0	46	2	0	3	84	0	141
Total	0	0	0	0	0	99	0	41	0	0	1,574	125	1	14	1,069	0	2,923

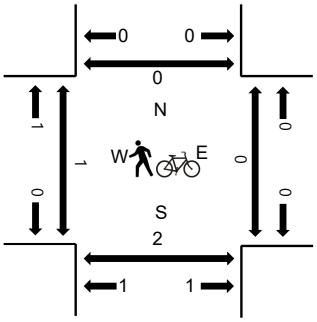
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #7 FULTON IND BLVD & MENDEL DR PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MENDEL DR Eastbound				MENDEL DR Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	66	16	9	0	6	1	13	1	3	437	8	5	16	249	9	839	2,945	0	0	0	0
3:45 PM	0	36	1	11	0	9	2	10	0	2	300	4	5	21	208	14	623	2,862	0	0	0	0
4:00 PM	0	37	1	18	0	16	3	17	0	5	386	6	4	9	282	6	790	2,982	0	1	1	0
4:15 PM	0	17	0	5	0	9	1	18	1	4	366	5	8	6	244	9	693	2,955	0	0	0	0
4:30 PM	0	37	3	6	0	6	3	19	1	8	411	3	14	9	230	6	756	3,009	1	0	1	0
4:45 PM	0	27	2	11	0	10	2	11	0	7	390	3	2	4	252	22	743	2,921	0	0	0	0
5:00 PM	0	36	5	11	0	7	2	14	0	2	405	6	6	12	248	9	763	2,830	0	0	1	0
5:15 PM	0	34	4	10	0	5	1	11	1	3	386	1	2	8	268	13	747	2,754	0	0	0	0
5:30 PM	0	26	2	7	0	4	0	7	0	2	304	4	3	10	282	17	668	2,574	0	0	0	0
5:45 PM	0	28	2	3	0	7	1	16	0	2	296	7	4	19	242	25	652		1	0	0	0
6:00 PM	0	50	4	6	0	4	1	9	0	0	339	2	2	13	249	8	687		1	0	0	0
6:15 PM	0	13	2	3	0	4	1	8	0	0	280	3	5	12	230	6	567		0	0	0	0

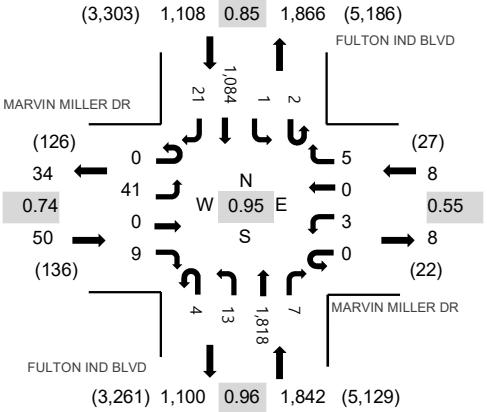
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	8	1	5	0	2	1	1	0	3	72	2	0	2	69	3	169
Lights	0	119	12	31	0	24	5	50	1	15	1,474	11	23	30	853	42	2,690
Mediums	0	7	1	2	0	2	2	4	1	2	46	0	1	1	76	5	150
Total	0	134	14	38	0	28	8	55	2	20	1,592	13	24	33	998	50	3,009

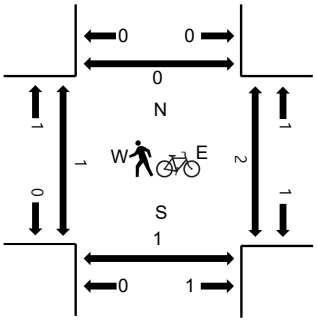
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #8 FULTON IND BLVD & MARVIN MILLER DR PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARVIN MILLER DR Eastbound				MARVIN MILLER DR Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	4	0	2	0	1	0	1	2	2	540	1	0	0	270	7	830	2,952	0	0	0	0
3:45 PM	0	8	0	3	0	0	0	1	3	1	336	1	2	1	260	5	621	2,852	0	0	0	0
4:00 PM	0	16	0	3	0	1	0	2	0	1	485	2	0	0	272	9	791	3,008	0	0	0	0
4:15 PM	0	11	0	2	0	1	0	1	2	4	407	1	1	1	275	4	710	2,955	0	1	0	0
4:30 PM	0	10	0	3	0	0	0	1	1	4	477	2	0	0	228	4	730	2,984	0	0	1	0
4:45 PM	0	4	0	1	0	1	0	1	1	4	449	2	1	0	309	4	777	3,007	1	1	0	0
5:00 PM	0	16	0	3	0	0	0	5	0	2	454	1	1	2	251	3	738	2,845	0	0	0	0
5:15 PM	0	9	0	1	0	2	0	1	1	5	454	1	1	1	254	9	739	2,804	0	0	0	0
5:30 PM	0	8	0	3	0	1	0	0	2	8	383	0	0	1	331	16	753	2,659	0	0	0	0
5:45 PM	0	5	0	5	0	0	0	1	2	4	337	1	1	1	252	6	615		1	0	0	0
6:00 PM	0	6	0	2	0	0	0	4	1	9	413	2	1	0	251	8	697		0	0	0	0
6:15 PM	0	7	0	4	0	0	0	2	0	2	318	1	1	0	254	5	594		0	0	0	0

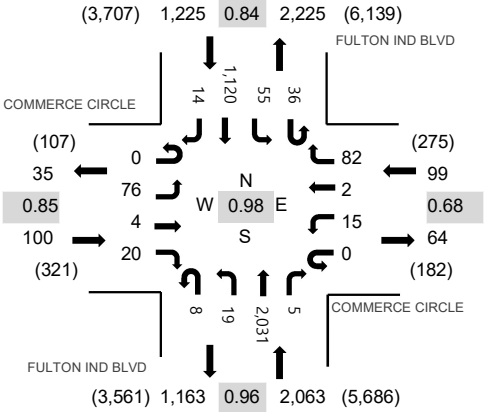
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	84	0	0	0	107	0	192
Lights	0	41	0	9	0	1	0	0	3	13	1,669	1	2	0	902	18	2,659
Mediums	0	0	0	0	0	2	0	4	1	0	65	6	0	1	75	3	157
Total	0	41	0	9	0	3	0	5	4	13	1,818	7	2	1	1,084	21	3,008

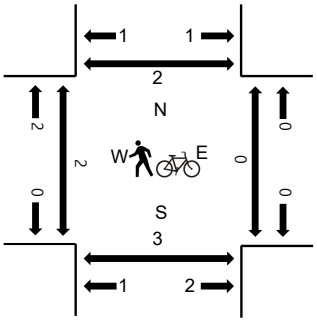
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #9 FULTON IND BLVD & COMMERCE CIRCLE PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	COMMERCE CIRCLE Eastbound				COMMERCE CIRCLE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	29	0	4	0	7	0	8	2	4	573	2	14	5	280	6	934	3,466	1	0	1	1
3:45 PM	0	27	1	4	0	7	0	18	4	3	426	0	8	22	296	1	817	3,373	0	0	4	0
4:00 PM	0	13	0	3	0	10	0	31	3	3	473	0	7	16	262	5	826	3,423	0	0	1	0
4:15 PM	0	17	2	4	0	5	1	8	3	5	507	1	9	22	301	4	889	3,487	0	0	0	1
4:30 PM	0	30	0	5	0	4	0	27	3	5	472	2	9	13	268	3	841	3,432	1	0	0	1
4:45 PM	0	15	0	4	0	1	0	24	1	4	519	2	12	9	271	5	867	3,467	0	0	2	0
5:00 PM	0	14	2	7	0	5	1	23	1	5	533	0	6	11	280	2	890	3,346	1	0	1	0
5:15 PM	0	18	0	17	0	3	1	13	2	7	489	1	8	9	260	6	834	3,234	0	3	1	1
5:30 PM	0	22	0	8	0	0	1	10	4	4	439	5	9	17	350	7	876	3,091	1	0	3	2
5:45 PM	0	18	3	5	0	2	0	16	6	4	373	1	4	12	299	3	746		0	1	2	5
6:00 PM	0	22	1	5	0	3	1	21	3	2	412	1	13	15	274	5	778		1	0	0	0
6:15 PM	0	13	0	8	0	7	0	17	4	6	364	3	6	4	256	3	691		0	0	0	1

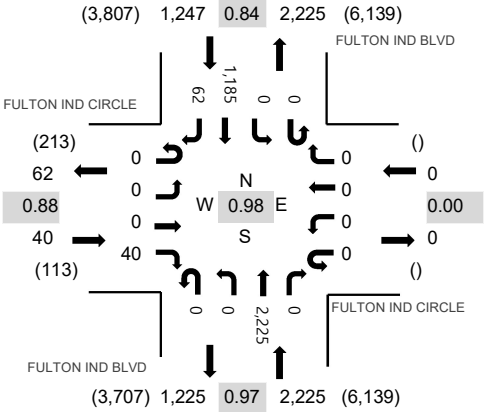
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	91	0	0	0	96	0	187
Lights	0	74	4	19	0	13	2	82	8	19	1,861	4	35	54	921	13	3,109
Mediums	0	2	0	1	0	2	0	0	0	0	79	1	1	1	103	1	191
Total	0	76	4	20	0	15	2	82	8	19	2,031	5	36	55	1,120	14	3,487

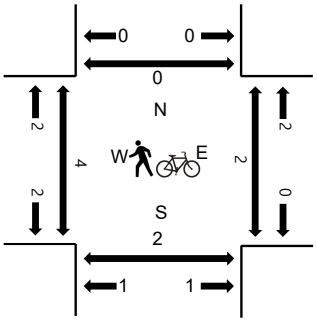
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #10 FULTON IND BLVD & FULTON IND CIRCLE PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	FULTON IND CIRCLE Eastbound				FULTON IND CIRCLE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	0	0	10	0	0	0	0	0	0	624	0	0	0	295	24	953	3,500	1	0	2	0
3:45 PM	0	0	0	10	0	0	0	0	0	0	479	0	0	0	317	18	824	3,400	0	0	0	0
4:00 PM	0	0	0	8	0	0	0	0	0	0	524	0	0	0	282	16	830	3,458	1	0	0	0
4:15 PM	0	0	0	11	0	0	0	0	0	0	541	0	0	0	325	16	893	3,512	0	1	1	0
4:30 PM	0	0	0	12	0	0	0	0	0	0	538	0	0	0	281	22	853	3,443	2	1	1	0
4:45 PM	0	0	0	11	0	0	0	0	0	0	570	0	0	0	286	15	882	3,476	0	0	0	0
5:00 PM	0	0	0	6	0	0	0	0	0	0	576	0	0	0	293	9	884	3,340	2	0	0	0
5:15 PM	0	0	0	9	0	0	0	0	0	0	528	0	0	0	274	13	824	3,251	1	3	2	1
5:30 PM	0	0	0	10	0	0	0	0	0	0	480	0	0	0	373	23	886	3,116	4	2	2	0
5:45 PM	0	0	0	8	0	0	0	0	0	0	411	0	0	0	310	17	746		2	6	5	0
6:00 PM	0	0	0	8	0	0	0	0	0	0	468	0	0	0	299	20	795		3	0	1	0
6:15 PM	0	0	0	10	0	0	0	0	0	0	400	0	0	0	259	20	689		3	1	1	0

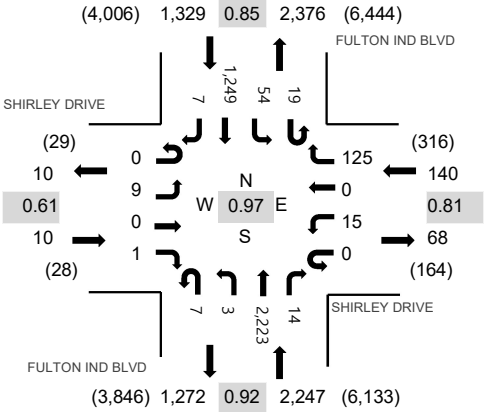
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	91	0	0	0	96	0	187
Lights	0	0	0	40	0	0	0	0	0	0	2,052	0	0	0	983	59	3,134
Mediums	0	0	0	0	0	0	0	0	0	0	82	0	0	0	106	3	191
Total	0	0	0	40	0	0	0	0	0	0	2,225	0	0	0	1,185	62	3,512

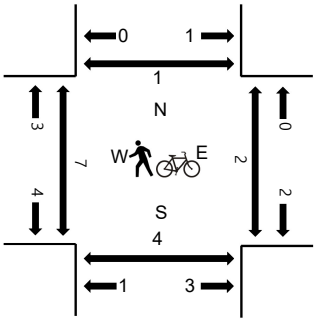
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #11 FULTON IND BLVD & SHIRLEY DRIVE PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SHIRLEY DRIVE Eastbound				SHIRLEY DRIVE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	1	0	1	0	2	0	11	0	0	604	4	6	8	327	3	967	3,626	3	1	0	0
3:45 PM	0	2	0	2	0	3	0	23	3	1	474	4	10	7	327	0	856	3,532	0	0	1	0
4:00 PM	0	2	0	5	0	5	0	25	2	1	528	2	9	12	280	2	873	3,640	4	0	0	0
4:15 PM	0	3	0	0	0	2	0	23	1	2	535	4	3	15	341	1	930	3,726	0	2	1	0
4:30 PM	0	3	0	0	0	6	0	28	3	0	502	5	8	16	300	2	873	3,647	1	0	0	0
4:45 PM	0	2	0	0	0	3	0	35	2	1	604	1	3	14	297	2	964	3,686	0	0	2	0
5:00 PM	0	1	0	1	0	4	0	39	1	0	582	4	5	9	311	2	959	3,506	5	0	1	1
5:15 PM	0	0	0	0	0	4	0	19	0	1	523	5	7	8	280	4	851	3,355	0	0	0	1
5:30 PM	0	1	0	0	0	5	0	17	2	0	477	4	4	11	390	1	912	3,210	3	2	1	2
5:45 PM	0	1	0	1	0	2	0	26	2	1	395	1	13	7	332	3	784		1	0	0	0
6:00 PM	0	1	0	1	0	2	0	12	0	0	462	4	8	7	310	1	808		2	0	0	0
6:15 PM	0	0	0	0	0	4	0	16	2	0	381	3	10	9	280	1	706		2	1	0	0

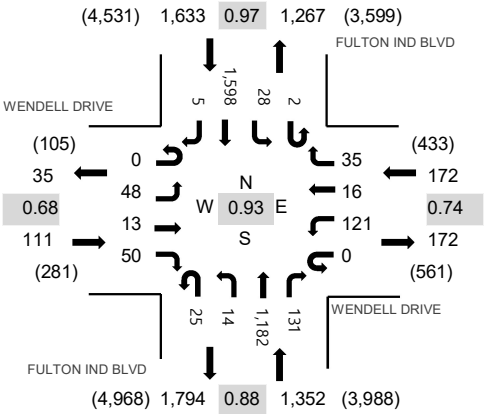
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	1	0	2	0	0	92	0	0	7	96	0	198
Lights	0	8	0	1	0	13	0	119	7	3	2,051	12	18	38	1,048	7	3,325
Mediums	0	1	0	0	0	1	0	4	0	0	80	2	1	9	105	0	203
Total	0	9	0	1	0	15	0	125	7	3	2,223	14	19	54	1,249	7	3,726

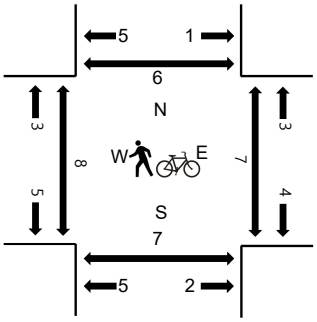
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: #12 FULTON IND BLVD & WENDELL DRIVE PM
Date: Wednesday, May 5, 2021
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	WENDELL DRIVE Eastbound				WENDELL DRIVE Westbound				FULTON IND BLVD Northbound				FULTON IND BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
3:30 PM	0	7	5	17	0	32	1	10	6	6	292	34	0	6	327	1	744	3,017	1	3	0	1
3:45 PM	0	5	5	9	0	22	3	5	9	10	293	52	0	5	349	1	768	3,050	2	1	1	2
4:00 PM	0	5	2	12	0	22	1	6	12	3	258	26	1	11	369	3	731	3,165	1	1	1	0
4:15 PM	0	4	4	7	0	18	0	4	6	4	277	45	2	5	396	2	774	3,212	6	0	4	3
4:30 PM	0	6	1	22	0	23	5	5	7	4	262	36	2	7	395	2	777	3,259	4	1	0	1
4:45 PM	0	11	6	12	0	37	2	7	10	3	320	50	0	7	414	4	883	3,268	4	0	0	3
5:00 PM	0	22	2	21	0	26	2	10	7	4	266	25	0	10	383	0	778	3,111	2	3	1	1
5:15 PM	0	10	1	9	0	19	3	8	5	3	316	28	2	6	411	0	821	3,077	1	4	3	1
5:30 PM	0	5	4	8	0	39	9	10	3	4	280	28	0	5	390	1	786	2,957	1	0	3	1
5:45 PM	0	5	2	12	0	21	2	6	1	4	289	42	0	10	330	2	726		2	4	5	2
6:00 PM	0	9	2	11	0	18	3	7	9	5	272	35	0	2	371	0	744		0	1	3	0
6:15 PM	0	7	1	10	0	36	4	7	5	3	283	46	3	5	290	1	701		3	1	3	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	4	0	0	0	0	0	2	49	1	0	0	71	0	127
Lights	0	48	12	45	0	115	16	34	24	10	1,098	124	2	28	1,457	5	3,018
Mediums	0	0	1	1	0	6	0	1	1	2	35	6	0	0	70	0	123
Total	0	48	13	50	0	121	16	35	25	14	1,182	131	2	28	1,598	5	3,268

HCS Roadway Segment Analyses

2021 Existing Conditions

MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Campbellton Rd. to Camp Creek
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	960	Peak-Hour Factor, PHF	0.93
AADT(veh/h)		%Trucks and Buses, P_T	10
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.870

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	4
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	55.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.0
f_M (mi/h)	0.0
FFS (mi/h)	53.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	593
Speed, S (mi/h)	55.0
D (pc/mi/ln)	10.8
LOS	A

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*516.1*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.71*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Campbellton Rd. to Camp Creek
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1255	Peak-Hour Factor, PHF	0.95
AADT(veh/h)		%Trucks and Buses, P_T	10
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.870

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	5
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	55.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.3
f_M (mi/h)	0.0
FFS (mi/h)	53.3

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	759
Speed, S (mi/h)	55.0
D (pc/mi/ln)	13.8
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*660.5*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.83*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Camp Creek to Wharton Dr.
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1579	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	8
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.893

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	7
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.8
f_M (mi/h)	0.0
FFS (mi/h)	42.8

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	961
Speed, S (mi/h)	45.0
D (pc/mi/ln)	21.4
LOS	C

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*858.2*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.20*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Camp Creek to Wharton Dr.
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1255	Peak-Hour Factor, PHF	0.98
AADT(veh/h)		%Trucks and Buses, P_T	9
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.881

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	7
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.8
f_M (mi/h)	0.0
FFS (mi/h)	42.8

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	726
Speed, S (mi/h)	45.0
D (pc/mi/ln)	16.1
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*640.3*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.44*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Wharton Dr. to I-20
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1807	Peak-Hour Factor, PHF	0.93
AADT(veh/h)		%Trucks and Buses, P_T	8
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	3

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.893

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	725
Speed, S (mi/h)	45.0
D (pc/mi/ln)	16.1
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*647.7*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.05*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Wharton Dr. to I-20
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1547	Peak-Hour Factor, PHF	0.95
AADT(veh/h)		%Trucks and Buses, P_T	9
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Mountainous
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	3

Calculate Flow Adjustments

f_p	1.00	E_R	4.0
E_T	4.5	f_{HV}	0.760

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	713
Speed, S (mi/h)	45.0
D (pc/mi/ln)	15.8
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*542.8*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.06*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	1-20 to Donald Lee Hollowell
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1121	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	21
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Level
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	1.2
E_T	1.5	f_{HV}	0.905

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	673
Speed, S (mi/h)	45.0
D (pc/mi/ln)	15.0
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*609.2*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*11.73*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	1-20 to Donald Lee Hollowell
Jurisdiction	Fulton County
Analysis Year	2021

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1287	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	20
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Mountainous
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	4.0
E_T	4.5	f_{HV}	0.588

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	1189
Speed, S (mi/h)	45.0
D (pc/mi/ln)	26.4
LOS	D

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*699.5*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*11.22*
Bicycle level of service (Exhibit 15-4)	*F*

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HCS Roadway Segment Analysis

Future 2031 Condition

MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Campbellton Rd. to Camp Creek
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1114	Peak-Hour Factor, PHF	0.93
AADT(veh/h)		%Trucks and Buses, P_T	10
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.870

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	4
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	55.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.0
f_M (mi/h)	0.0
FFS (mi/h)	53.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	688
Speed, S (mi/h)	55.0
D (pc/mi/ln)	12.5
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*598.9*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.78*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Campbellton Rd. to Camp Creek
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1456	Peak-Hour Factor, PHF	0.95
AADT(veh/h)		%Trucks and Buses, P_T	10
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.870

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	5
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	55.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.3
f_M (mi/h)	0.0
FFS (mi/h)	53.3

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	881
Speed, S (mi/h)	55.0
D (pc/mi/ln)	16.0
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*766.3*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.91*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Camp Creek to Wharton Dr.
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1832	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	8
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.893

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	7
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.8
f_M (mi/h)	0.0
FFS (mi/h)	42.8

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	1115
Speed, S (mi/h)	45.0
D (pc/mi/ln)	24.8
LOS	C

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*995.7*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.02*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Camp Creek to Wharton Dr.
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1456	Peak-Hour Factor, PHF	0.98
AADT(veh/h)		%Trucks and Buses, P_T	9
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.881

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	7
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	1.8
f_M (mi/h)	0.0
FFS (mi/h)	42.8

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	843
Speed, S (mi/h)	45.0
D (pc/mi/ln)	18.7
LOS	C

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*742.9*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.22*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Wharton Dr. to I-20
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	2093	Peak-Hour Factor, PHF	0.93
AADT(veh/h)		%Trucks and Buses, P_T	8
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Rolling
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	3

Calculate Flow Adjustments

f_p	1.00	E_R	2.0
E_T	2.5	f_{HV}	0.893

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	840
Speed, S (mi/h)	45.0
D (pc/mi/ln)	18.7
LOS	C

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*750.2*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*5.88*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	Wharton Dr. to I-20
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1795	Peak-Hour Factor, PHF	0.95
AADT(veh/h)		%Trucks and Buses, P_T	9
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Mountainous
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	3

Calculate Flow Adjustments

f_p	1.00	E_R	4.0
E_T	4.5	f_{HV}	0.760

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	828
Speed, S (mi/h)	45.0
D (pc/mi/ln)	18.4
LOS	C

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*629.8*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*6.13*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 1)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	1-20 to Donald Lee Hollowell
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1300	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	21
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Level
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	1.2
E_T	1.5	f_{HV}	0.905

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	780
Speed, S (mi/h)	45.0
D (pc/mi/ln)	17.3
LOS	B

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*706.5*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*11.81*
Bicycle level of service (Exhibit 15-4)	*F*

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MULTILANE HIGHWAYS WORKSHEET(Direction 2)

☒

General Information

Analyst	David A. Fairlie, P.E.
Agency or Company	ATLAS
Date Performed	6/25/2021
Analysis Time Period	Peak hour

Site Information

Highway/Direction to Travel	FIB
From/To	1-20 to Donald Lee Hollowell
Jurisdiction	Fulton County
Analysis Year	2031

Project Description Fulton Industrial Boulevard (SR 70) Freight Cluster Plan

☐ Oper.(LOS) ☐ Des. (N) ☐ Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1493	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	20
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Mountainous
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	4.0
E_T	4.5	f_{HV}	0.588

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	10.0
Access Points, A (A/mi)	8
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.4
f_A (mi/h)	2.0
f_M (mi/h)	0.0
FFS (mi/h)	42.6

Operations

Operational (LOS)

Flow Rate, v_p (pc/h/ln)	1379
Speed, S (mi/h)	45.0
D (pc/mi/ln)	30.6
LOS	D

Design

Design (N)

Required Number of Lanes, N

Flow Rate, v_p (pc/h)

Max Service Flow Rate (pc/h/ln)

Design LOS

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*811.4*
Effective width, W_v (Eq. 15-29) ft	*16.00*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*11.31*
Bicycle level of service (Exhibit 15-4)	*F*

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Existing (2021) AM Synchro Analysis Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	318	390	54	37	190	67	69	577	109	14	151	128
Future Volume (vph)	318	390	54	37	190	67	69	577	109	14	151	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	400		400	300		300
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.961				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1810	1482	1752	1682	0	1805	3438	1568	1327	2983	1468
Flt Permitted	0.394			0.452			0.565			0.282		
Satd. Flow (perm)	727	1810	1482	834	1682	0	1074	3438	1568	394	2983	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			176		27				176			176
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			851			3037			3592	
Travel Time (s)		18.4			19.3			69.0			81.6	
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.82	0.82	0.82	0.86	0.86	0.86
Heavy Vehicles (%)	3%	5%	9%	3%	7%	13%	0%	5%	3%	36%	21%	10%
Adj. Flow (vph)	335	411	57	39	198	70	84	704	133	16	176	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	335	411	57	39	268	0	84	704	133	16	176	149
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

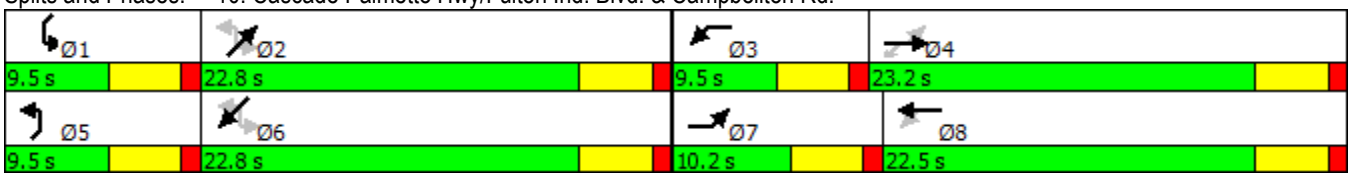
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.2	23.2	23.2	9.5	22.5		9.5	22.8	22.8	9.5	22.8	22.8
Total Split (%)	15.7%	35.7%	35.7%	14.6%	34.6%		14.6%	35.1%	35.1%	14.6%	35.1%	35.1%
Maximum Green (s)	5.7	18.7	18.7	5.0	18.0		5.0	18.3	18.3	5.0	18.3	18.3
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.2	20.3	20.3	18.1	12.9		16.9	16.1	16.1	15.2	12.5	12.5
Actuated g/C Ratio	0.44	0.40	0.40	0.36	0.26		0.34	0.32	0.32	0.30	0.25	0.25
v/c Ratio	0.76	0.56	0.08	0.10	0.60		0.19	0.64	0.21	0.07	0.24	0.30
Control Delay	27.3	19.6	0.2	9.8	21.7		12.8	18.9	2.7	12.3	18.6	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	19.6	0.2	9.8	21.7		12.8	18.9	2.7	12.3	18.6	4.5
LOS	C	B	A	A	C		B	B	A	B	B	A
Approach Delay		21.4			20.2			16.0			12.2	
Approach LOS		C			C			B			B	
90th %ile Green (s)	5.7	18.7	18.7	5.0	18.0		5.0	18.3	18.3	5.0	18.3	18.3
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Max	Max	Max	Hold	Hold
70th %ile Green (s)	5.7	18.7	18.7	5.0	18.0		5.0	19.0	19.0	0.0	9.5	9.5
70th %ile Term Code	Max	Max	Max	Max	Hold		Max	Hold	Hold	Skip	Gap	Gap
50th %ile Green (s)	5.7	22.5	22.5	0.0	12.3		5.0	17.8	17.8	0.0	8.3	8.3
50th %ile Term Code	Max	Hold	Hold	Skip	Gap		Max	Hold	Hold	Skip	Gap	Gap
30th %ile Green (s)	5.7	20.4	20.4	0.0	10.2		0.0	14.4	14.4	0.0	14.4	14.4
30th %ile Term Code	Max	Hold	Hold	Skip	Gap		Skip	Gap	Gap	Skip	Hold	Hold
10th %ile Green (s)	5.7	17.6	17.6	0.0	7.4		0.0	10.9	10.9	0.0	10.9	10.9
10th %ile Term Code	Max	Hold	Hold	Skip	Gap		Skip	Gap	Gap	Skip	Hold	Hold
Queue Length 50th (ft)	60	77	0	6	61		16	82	0	3	23	0
Queue Length 95th (ft)	#225	#282	0	24	148		38	166	14	13	47	24
Internal Link Dist (ft)		728			771			2957			3512	
Turn Bay Length (ft)	300		300	300			400		400	300		300
Base Capacity (vph)	440	739	709	393	640		435	1304	703	214	1124	662
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.56	0.08	0.10	0.42		0.19	0.54	0.19	0.07	0.16	0.23

Intersection Summary

Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 50.4	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 66.8%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 65	
70th %ile Actuated Cycle: 56.2	
50th %ile Actuated Cycle: 49.3	
30th %ile Actuated Cycle: 43.8	
10th %ile Actuated Cycle: 37.5	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Cascade Palmetto Hwy/Fulton Ind. Blvd. & Campbellton Rd.



Intersection	
Int Delay, s/veh	2.4

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	40	19	37	1125	4	412	48
Future Vol, veh/h	40	19	37	1125	4	412	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Yield
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	57	57	96	96	86	86	86
Heavy Vehicles, %	33	37	24	4	0	14	15
Mvmt Flow	70	33	39	1172	5	479	56

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1151	240	479	0	855	-	0
Stage 1	488	-	-	-	-	-	-
Stage 2	663	-	-	-	-	-	-
Critical Hdwy	7.46	7.64	4.58	-	6.4	-	-
Critical Hdwy Stg 1	6.46	-	-	-	-	-	-
Critical Hdwy Stg 2	6.46	-	-	-	-	-	-
Follow-up Hdwy	3.83	3.67	2.44	-	2.5	-	-
Pot Cap-1 Maneuver	150	664	939	-	418	-	-
Stage 1	502	-	-	-	-	-	-
Stage 2	399	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	144	664	939	-	418	-	-
Mov Cap-2 Maneuver	144	-	-	-	-	-	-
Stage 1	502	-	-	-	-	-	-
Stage 2	382	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	38.5	0.3	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	939	-	144	664	418	-	-
HCM Lane V/C Ratio	0.041	-	0.487	0.05	0.011	-	-
HCM Control Delay (s)	9	-	51.7	10.7	13.7	-	-
HCM Lane LOS	A	-	F	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	46.7

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	79	45	46	1449	3	451	92
Future Vol, veh/h	79	45	46	1449	3	451	92
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Free
Storage Length	0	0	300	-	250	-	300
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	41	41	91	91	92	92	92
Heavy Vehicles, %	34	18	9	4	0	12	35
Mvmt Flow	193	110	51	1592	3	490	100

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1394	245	490	0	1162	-	0
Stage 1	497	-	-	-	-	-	-
Stage 2	897	-	-	-	-	-	-
Critical Hdwy	7.48	7.26	4.28	-	6.4	-	-
Critical Hdwy Stg 1	6.48	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	-	-	-	-	-	-
Follow-up Hdwy	3.84	3.48	2.29	-	2.5	-	-
Pot Cap-1 Maneuver	~ 99	709	1022	-	266	-	0
Stage 1	494	-	-	-	-	-	0
Stage 2	290	-	-	-	-	-	0
Platoon blocked, %				-		-	
Mov Cap-1 Maneuver	~ 94	709	1022	-	266	-	-
Mov Cap-2 Maneuver	~ 94	-	-	-	-	-	-
Stage 1	494	-	-	-	-	-	-
Stage 2	276	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 374.4	0.3	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT
Capacity (veh/h)	1022	-	94	709	266	-
HCM Lane V/C Ratio	0.049	-	2.05	0.155	0.012	-
HCM Control Delay (s)	8.7	-	$ 581.4	11	18.7	-
HCM Lane LOS	A	-	F	B	C	-
HCM 95th %tile Q(veh)	0.2	-	16.7	0.5	0	-

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

Intersection	
Int Delay, s/veh	20.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	38	16	33	39	22	54	74	820	24	22	464	61
Future Vol, veh/h	38	16	33	39	22	54	74	820	24	22	464	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	300	-	200	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	81	81	81	89	89	89	97	97	97
Heavy Vehicles, %	35	0	42	8	0	4	10	12	21	0	20	25
Mvmt Flow	49	21	42	48	27	67	83	921	27	23	478	63

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1165	1612	239	1383	1612	461	478	0	0	921	0	0
Stage 1	524	524	-	1088	1088	-	-	-	-	-	-	-
Stage 2	641	1088	-	295	524	-	-	-	-	-	-	-
Critical Hdwy	8.2	6.5	7.74	7.66	6.5	6.98	4.3	-	-	4.1	-	-
Critical Hdwy Stg 1	7.2	5.5	-	6.66	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.2	5.5	-	6.66	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.85	4	3.72	3.58	4	3.34	2.3	-	-	2.2	-	-
Pot Cap-1 Maneuver	115	105	653	98	105	542	1026	-	-	750	-	-
Stage 1	428	533	-	220	294	-	-	-	-	-	-	-
Stage 2	358	294	-	672	533	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	72	94	653	70	94	542	1026	-	-	750	-	-
Mov Cap-2 Maneuver	72	94	-	70	94	-	-	-	-	-	-	-
Stage 1	393	517	-	202	270	-	-	-	-	-	-	-
Stage 2	260	270	-	585	517	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	108.7	175.3	0.7	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SELn2	SWL	SWT	SWR
Capacity (veh/h)	1026	-	-	129	77	653	750	-	-
HCM Lane V/C Ratio	0.081	-	-	1.101	0.899	0.065	0.03	-	-
HCM Control Delay (s)	8.8	-	-	175.3	168.4	10.9	10	-	-
HCM Lane LOS	A	-	-	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	8.2	4.6	0.2	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	71	50	50	36	50	100	676	50	126	798	100
Future Volume (vph)	100	71	50	50	36	50	100	676	50	126	798	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		150
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.938			0.950			0.990				0.850
Flt Protected	0.950				0.982		0.950			0.950		
Satd. Flow (prot)	1128	1114	0	0	1477	0	1128	2978	0	1504	3008	897
Flt Permitted	0.555				0.832		0.206			0.252		
Satd. Flow (perm)	659	1114	0	0	1251	0	245	2978	0	399	3008	897
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			40			12				164
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		812			1105			708			889	
Travel Time (s)		18.5			25.1			16.1			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	60%	60%	60%	20%	20%	20%	60%	20%	20%	20%	20%	80%
Adj. Flow (vph)	109	77	54	54	39	54	109	735	54	137	867	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	131	0	0	147	0	109	789	0	137	867	109
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	

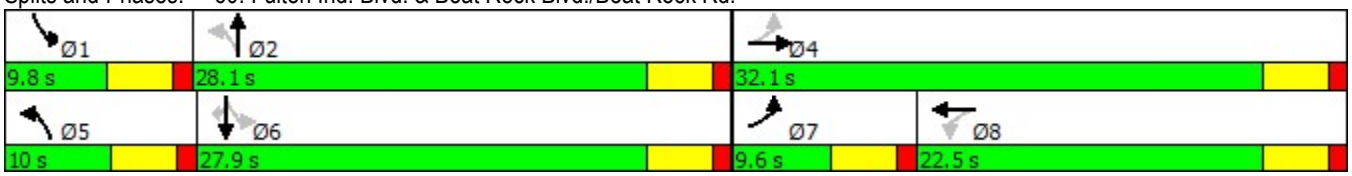
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	9.6	32.1		22.5	22.5		10.0	28.1		9.8	27.9	27.9
Total Split (%)	13.7%	45.9%		32.1%	32.1%		14.3%	40.1%		14.0%	39.9%	39.9%
Maximum Green (s)	5.1	27.6		18.0	18.0		5.5	23.6		5.3	23.4	23.4
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		Min	Min		None	Min		None	Min	Min
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0			0	0
Act Effct Green (s)	17.7	17.7			10.9		25.5	21.6		25.2	21.5	21.5
Actuated g/C Ratio	0.31	0.31			0.19		0.45	0.38		0.45	0.38	0.38
v/c Ratio	0.43	0.34			0.54		0.52	0.69		0.46	0.76	0.25
Control Delay	21.4	12.6			25.7		22.1	20.4		15.3	23.2	2.6
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	21.4	12.6			25.7		22.1	20.4		15.3	23.2	2.6
LOS	C	B			C		C	C		B	C	A
Approach Delay		16.6			25.7			20.6			20.2	
Approach LOS		B			C			C			C	
90th %ile Green (s)	5.1	26.6		17.0	17.0		5.5	23.6		5.3	23.4	23.4
90th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	Max
70th %ile Green (s)	5.1	22.7		13.1	13.1		5.5	23.6		5.3	23.4	23.4
70th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	Max
50th %ile Green (s)	5.1	20.2		10.6	10.6		5.5	23.6		5.3	23.4	23.4
50th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Max	Max
30th %ile Green (s)	5.1	17.9		8.3	8.3		5.5	23.0		5.3	22.8	22.8
30th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Gap	Gap
10th %ile Green (s)	0.0	5.5		5.5	5.5		0.0	11.7		0.0	11.7	11.7
10th %ile Term Code	Skip	Gap		Gap	Gap		Skip	Hold		Skip	Gap	Gap
Queue Length 50th (ft)	31	21			37		20	127		24	147	0
Queue Length 95th (ft)	65	57			88		#70	217		61	#277	13
Internal Link Dist (ft)		732			1025			628			809	
Turn Bay Length (ft)							300			300		150
Base Capacity (vph)	254	632			479		208	1422		295	1418	509
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.43	0.21			0.31		0.52	0.55		0.46	0.61	0.21

Intersection Summary

Area Type: Other	
Cycle Length: 70	
Actuated Cycle Length: 56.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 69	
70th %ile Actuated Cycle: 65.1	
50th %ile Actuated Cycle: 62.6	
30th %ile Actuated Cycle: 59.7	
10th %ile Actuated Cycle: 26.2	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: Fulton Ind. Blvd. & Boat Rock Blvd./Boat Rock Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	946	6	25	1020	31	2	0	18	41	0	2
Future Volume (vph)	16	946	6	25	1020	31	2	0	18	41	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950				0.950		0.950		
Satd. Flow (prot)	1421	3167	1615	1556	3167	1091	0	1203	1380	1026	1077	0
Flt Permitted	0.139			0.238						0.615		
Satd. Flow (perm)	208	3167	1615	390	3167	1091	0	1267	1380	664	1077	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127		217	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		849			1099			609			533	
Travel Time (s)		19.3			25.0			13.8			12.1	
Peak Hour Factor	0.93	0.93	0.93	0.72	0.72	0.72	0.83	0.83	0.83	0.84	0.84	0.84
Heavy Vehicles (%)	27%	14%	0%	16%	14%	48%	50%	0%	17%	76%	2%	50%
Adj. Flow (vph)	17	1017	6	35	1417	43	2	0	22	49	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1017	6	35	1417	43	0	2	22	49	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	9.5	48.5	48.5	9.5	48.5	48.5	9.5	22.5	22.5	9.5	22.5	
Total Split (%)	10.6%	53.9%	53.9%	10.6%	53.9%	53.9%	10.6%	25.0%	25.0%	10.6%	25.0%	
Maximum Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	5.0	18.0	18.0	5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	42.8	43.8	43.8	43.5	45.4	45.4		6.2	6.2	8.9	9.2	
Actuated g/C Ratio	0.75	0.76	0.76	0.76	0.79	0.79		0.11	0.11	0.16	0.16	
v/c Ratio	0.06	0.42	0.00	0.09	0.56	0.05		0.01	0.08	0.36	0.01	
Control Delay	4.4	7.5	0.0	4.2	7.8	0.1		31.5	0.6	32.3	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	4.4	7.5	0.0	4.2	7.8	0.1		31.5	0.6	32.3	0.0	
LOS	A	A	A	A	A	A		C	A	C	A	
Approach Delay		7.4			7.5			3.2			31.0	
Approach LOS		A			A			A			C	
90th %ile Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	0.0	6.5	6.5	5.0	16.0	
90th %ile Term Code	Max	Hold	Hold	Max	Max	Max	Skip	Gap	Gap	Max	Hold	
70th %ile Green (s)	0.0	34.5	34.5	5.0	44.0	44.0	0.0	6.0	6.0	5.0	15.5	
70th %ile Term Code	Skip	Hold	Hold	Max	Max	Max	Skip	Gap	Gap	Max	Hold	
50th %ile Green (s)	0.0	45.2	45.2	0.0	45.2	45.2	0.0	0.0	0.0	5.5	5.5	
50th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Hold	Hold	
30th %ile Green (s)	0.0	37.7	37.7	0.0	37.7	37.7	0.0	0.0	0.0	0.0	0.0	
30th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
10th %ile Green (s)	0.0	33.2	33.2	0.0	33.2	33.2	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	1	46	0	2	80	0		1	0	17	0	
Queue Length 95th (ft)	8	211	0	10	236	0		7	0	47	0	
Internal Link Dist (ft)		769			1019			529			453	
Turn Bay Length (ft)	300		300	300		300						
Base Capacity (vph)	269	2508	1305	406	2508	890		430	552	137	508	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.06	0.41	0.00	0.09	0.56	0.05		0.00	0.04	0.36	0.00	

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 57.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 45.7%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 78.5	
70th %ile Actuated Cycle: 68.5	
50th %ile Actuated Cycle: 59.7	
30th %ile Actuated Cycle: 42.2	
10th %ile Actuated Cycle: 37.7	

Splits and Phases: 70: Lakeview Ct. & Fulton Ind. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	888	100	67	591	230	300	363	100	85	300	185
Future Volume (vph)	139	888	100	67	591	230	300	363	100	85	300	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	350		300	350		300	300		300
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3072	4550	1417	3072	3167	1417	2334	2407	1077	2334	2407	1077
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3072	4550	1417	3072	3167	1417	2334	2407	1077	2334	2407	1077
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			250			164			203
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1099			761			631			649	
Travel Time (s)		25.0			17.3			14.3			14.8	
Peak Hour Factor	0.83	0.88	0.88	0.70	0.94	0.92	0.94	0.94	0.94	0.91	0.91	0.91
Heavy Vehicles (%)	14%	14%	14%	14%	14%	14%	50%	50%	50%	50%	50%	50%
Adj. Flow (vph)	167	1009	114	96	629	250	319	386	106	93	330	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	167	1009	114	96	629	250	319	386	106	93	330	203
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	9.5	22.9	22.9	9.5	22.9	22.9	15.1	25.9	25.9	11.7	22.5	22.5
Total Split (%)	13.6%	32.7%	32.7%	13.6%	32.7%	32.7%	21.6%	37.0%	37.0%	16.7%	32.1%	32.1%
Maximum Green (s)	5.0	18.4	18.4	5.0	18.4	18.4	10.6	21.4	21.4	7.2	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	5.0	19.5	19.5	5.0	17.3	17.3	10.7	20.5	20.5	6.8	14.3	14.3
Actuated g/C Ratio	0.08	0.30	0.30	0.08	0.26	0.26	0.16	0.31	0.31	0.10	0.22	0.22
v/c Ratio	0.71	0.74	0.21	0.41	0.75	0.45	0.84	0.51	0.24	0.38	0.63	0.52
Control Delay	49.8	26.6	2.6	36.1	29.3	6.1	50.2	22.6	2.5	33.8	29.0	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	26.6	2.6	36.1	29.3	6.1	50.2	22.6	2.5	33.8	29.0	8.9
LOS	D	C	A	D	C	A	D	C	A	C	C	A
Approach Delay		27.4			24.0			30.8			23.2	
Approach LOS		C			C			C			C	
90th %ile Green (s)	5.0	18.4	18.4	5.0	18.4	18.4	10.6	21.4	21.4	7.2	18.0	18.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.0	18.4	18.4	5.0	18.4	18.4	10.6	21.4	21.4	7.2	18.0	18.0
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	5.0	18.4	18.4	5.0	18.4	18.4	10.6	18.5	18.5	7.2	15.1	15.1
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Hold	Hold	Max	Gap	Gap
30th %ile Green (s)	5.0	18.4	18.4	5.0	18.4	18.4	10.6	15.8	15.8	6.9	12.1	12.1
30th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Gap	Gap
10th %ile Green (s)	5.0	22.7	22.7	0.0	13.2	13.2	10.6	24.2	24.2	0.0	9.1	9.1
10th %ile Term Code	Max	Hold	Hold	Skip	Gap	Gap	Max	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	35	140	0	20	122	0	67	71	0	18	64	0
Queue Length 95th (ft)	#73	#197	15	32	#188	50	#141	112	12	41	103	49
Internal Link Dist (ft)		1019			681			551			569	
Turn Bay Length (ft)	300		300	350		300	350		300	300		300
Base Capacity (vph)	236	1358	538	236	897	580	380	816	474	258	666	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.74	0.21	0.41	0.70	0.43	0.84	0.47	0.22	0.36	0.50	0.46

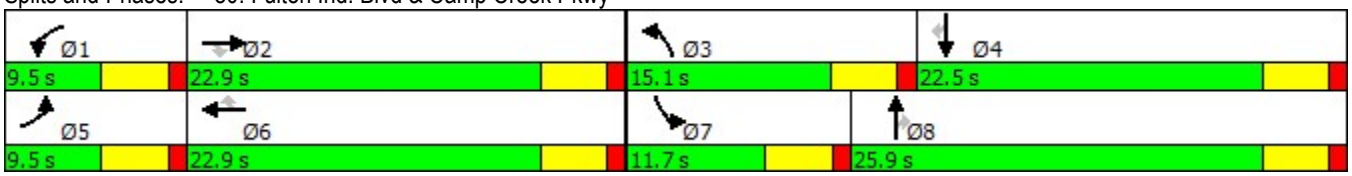
Intersection Summary

80: Fulton Ind. Blvd & Camp Creek Pkwy

Area Type: Other	
Cycle Length: 70	
Actuated Cycle Length: 65.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 26.6	Intersection LOS: C
Intersection Capacity Utilization 53.2%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 70	
70th %ile Actuated Cycle: 70	
50th %ile Actuated Cycle: 67.1	
30th %ile Actuated Cycle: 64.1	
10th %ile Actuated Cycle: 55.9	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 80: Fulton Ind. Blvd & Camp Creek Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	38	16	106	184	25	94	242	1970	188	82	711	20
Future Volume (vph)	38	16	106	184	25	94	242	1970	188	82	711	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		300	300		300
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1597	1727	1262	1597	1900	1538	1612	3252	1553	1671	3085	1468
Flt Permitted	0.738			0.547			0.313			0.053		
Satd. Flow (perm)	1241	1727	1262	920	1900	1538	531	3252	1553	93	3085	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			126			149			126
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		458			669			1465			1699	
Travel Time (s)		10.4			15.2			33.3			38.6	
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	13%	10%	28%	13%	0%	5%	12%	11%	4%	8%	17%	10%
Adj. Flow (vph)	44	18	122	222	30	113	252	2052	196	85	741	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	18	122	222	30	113	252	2052	196	85	741	21
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	9.6	22.5	22.5	11.8	24.7	24.7	22.0	86.2	86.2	9.5	73.7	73.7
Total Split (%)	7.4%	17.3%	17.3%	9.1%	19.0%	19.0%	16.9%	66.3%	66.3%	7.3%	56.7%	56.7%
Maximum Green (s)	5.1	18.0	18.0	7.3	20.2	20.2	17.5	81.7	81.7	5.0	69.2	69.2
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	12.9	7.8	7.8	17.8	12.0	12.0	91.0	81.8	81.8	80.8	75.8	75.8
Actuated g/C Ratio	0.11	0.07	0.07	0.15	0.10	0.10	0.76	0.68	0.68	0.67	0.63	0.63
v/c Ratio	0.30	0.16	0.61	1.25	0.16	0.42	0.50	0.93	0.18	0.66	0.38	0.02
Control Delay	48.6	55.5	22.0	192.5	52.6	11.9	8.0	25.6	2.5	44.0	12.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	55.5	22.0	192.5	52.6	11.9	8.0	25.6	2.5	44.0	12.0	0.1
LOS	D	E	C	F	D	B	A	C	A	D	B	A
Approach Delay		31.7			125.1			22.0			14.9	
Approach LOS		C			F			C			B	
90th %ile Green (s)	5.1	13.1	13.1	7.3	15.3	15.3	15.2	81.7	81.7	5.0	71.5	71.5
90th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
70th %ile Green (s)	5.1	8.2	8.2	7.3	10.4	10.4	12.0	81.7	81.7	5.0	74.7	74.7
70th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
50th %ile Green (s)	5.1	6.7	6.7	7.3	8.9	8.9	10.5	81.7	81.7	5.0	76.2	76.2
50th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
30th %ile Green (s)	5.1	5.8	5.8	7.3	8.0	8.0	9.4	81.7	81.7	5.0	77.3	77.3
30th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
10th %ile Green (s)	0.0	5.5	5.5	7.3	17.3	17.3	8.0	81.7	81.7	5.0	78.7	78.7
10th %ile Term Code	Skip	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
Queue Length 50th (ft)	30	13	0	~165	22	0	45	631	10	15	130	0
Queue Length 95th (ft)	62	36	50	#320	49	34	88	#1014	40	#104	215	0
Internal Link Dist (ft)		378			589			1385			1619	
Turn Bay Length (ft)							300		300	300		300
Base Capacity (vph)	148	259	296	177	320	364	562	2217	1106	128	1950	974
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.07	0.41	1.25	0.09	0.31	0.45	0.93	0.18	0.66	0.38	0.02

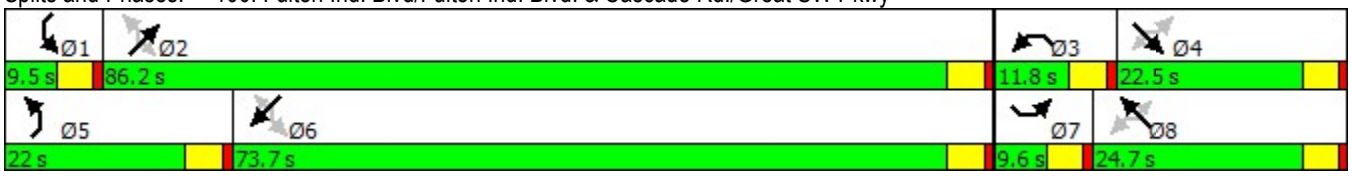
Intersection Summary

Area Type: Other	
Cycle Length: 130	
Actuated Cycle Length: 119.9	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 30.6	Intersection LOS: C
Intersection Capacity Utilization 87.1%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 125.1	
70th %ile Actuated Cycle: 120.2	
50th %ile Actuated Cycle: 118.7	
30th %ile Actuated Cycle: 117.8	
10th %ile Actuated Cycle: 117.5	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Fulton Ind. Blvd/Fulton Ind. Blvd. & Cascade Rd./Great SW Pkwy



Intersection	
Int Delay, s/veh	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	10	11	1	68	73	1301	49	121	816	39
Future Vol, veh/h	6	0	10	11	1	68	73	1301	49	121	816	39
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	88	88	88	97	97	97	80	80	80
Heavy Vehicles, %	17	0	60	18	0	29	4	12	10	9	16	28
Mvmt Flow	10	0	16	13	1	77	75	1341	51	151	1020	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2145	2815	510	2305	2815	671	1020	0	-	1341	0	0
Stage 1	1323	1323	-	1492	1492	-	-	-	-	-	-	-
Stage 2	822	1492	-	813	1323	-	-	-	-	-	-	-
Critical Hdwy	7.84	6.5	8.1	7.86	6.5	7.48	4.18	-	-	4.28	-	-
Critical Hdwy Stg 1	6.84	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.84	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4	3.9	3.68	4	3.59	2.24	-	-	2.29	-	-
Pot Cap-1 Maneuver	23	18	381	17	18	341	664	-	0	474	-	-
Stage 1	145	228	-	111	189	-	-	-	0	-	-	-
Stage 2	304	189	-	306	228	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	11	11	381	~ 11	11	341	664	-	-	474	-	-
Mov Cap-2 Maneuver	11	11	-	~ 11	11	-	-	-	-	-	-	-
Stage 1	129	155	-	98	168	-	-	-	-	-	-	-
Stage 2	207	168	-	200	155	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 342.7	138.3	0.6	2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	664	-	28	11	341	474	-	-
HCM Lane V/C Ratio	0.113	-	0.907	1.24	0.227	0.319	-	-
HCM Control Delay (s)	11.1	-	$ 342.7	$ 816.9	18.6	16.1	-	-
HCM Lane LOS	B	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.9	2.4	0.9	1.4	-	-

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	762	0	100	1570	0	0	9	0	0	59	0
Future Volume (vph)	100	762	0	100	1570	0	0	9	0	0	59	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		250	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt												
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1570	3139	1652	1570	3139	1652	0	2407	0	0	2407	0
Flt Permitted	0.070			0.270								
Satd. Flow (perm)	116	3139	1652	446	3139	1652	0	2407	0	0	2407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		642			731			251			574	
Travel Time (s)		14.6			16.6			5.7			13.0	
Peak Hour Factor	0.92	0.80	0.92	0.92	0.80	0.92	0.92	0.45	0.92	0.87	0.87	0.92
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	50%	50%	50%	50%	50%	50%
Adj. Flow (vph)	109	953	0	109	1963	0	0	20	0	0	68	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	953	0	109	1963	0	0	20	0	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm		NA			NA	
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	9.5	56.1	56.1	11.4	58.0	58.0	22.5	22.5		22.5	22.5	
Total Split (%)	10.6%	62.3%	62.3%	12.7%	64.4%	64.4%	25.0%	25.0%		25.0%	25.0%	
Maximum Green (s)	5.0	51.6	51.6	6.9	53.5	53.5	18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	
Act Effct Green (s)	61.0	57.8		62.9	56.4			7.6			7.6	
Actuated g/C Ratio	0.76	0.72		0.78	0.70			0.09			0.09	
v/c Ratio	0.62	0.42		0.25	0.89			0.09			0.30	
Control Delay	28.9	7.1		3.5	18.3			33.3			36.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	28.9	7.1		3.5	18.3			33.3			36.8	
LOS	C	A		A	B			C			D	
Approach Delay		9.4			17.5			33.3			36.8	
Approach LOS		A			B			C			D	
90th %ile Green (s)	5.0	51.6	51.6	6.9	53.5	53.5	9.9	9.9		9.9	9.9	
90th %ile Term Code	Max	Hold	Hold	Max	Max	Max	Hold	Hold		Gap	Gap	
70th %ile Green (s)	5.0	51.6	51.6	6.9	53.5	53.5	8.5	8.5		8.5	8.5	
70th %ile Term Code	Max	Hold	Hold	Max	Max	Max	Hold	Hold		Gap	Gap	
50th %ile Green (s)	5.0	51.8	51.8	6.7	53.5	53.5	7.6	7.6		7.6	7.6	
50th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
30th %ile Green (s)	5.0	52.3	52.3	6.2	53.5	53.5	6.7	6.7		6.7	6.7	
30th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
10th %ile Green (s)	5.0	78.0	78.0	0.0	68.5	68.5	0.0	0.0		0.0	0.0	
10th %ile Term Code	Max	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	10	109		9	385			4			16	
Queue Length 95th (ft)	#85	136		21	425			7			35	
Internal Link Dist (ft)		562			651			171			494	
Turn Bay Length (ft)	300			300								
Base Capacity (vph)	177	2251		446	2197			537			537	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.62	0.42		0.24	0.89			0.04			0.13	

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 80.6	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 81.9	
70th %ile Actuated Cycle: 80.5	
50th %ile Actuated Cycle: 79.6	
30th %ile Actuated Cycle: 78.7	
10th %ile Actuated Cycle: 82.5	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 130: Great SW Pkwy

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	24	1236	72	47	1181
Future Volume (vph)	69	24	1236	72	47	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	300	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.965			0.850		
Flt Protected	0.964				0.950	
Satd. Flow (prot)	1544	0	3112	1524	1570	3112
Flt Permitted	0.964				0.137	
Satd. Flow (perm)	1544	0	3112	1524	226	3112
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	27			75		
Link Speed (mph)	30		30			30
Link Distance (ft)	676		615			670
Travel Time (s)	15.4		14.0			15.2
Peak Hour Factor	0.75	0.75	0.96	0.96	0.70	0.70
Heavy Vehicles (%)	15%	13%	16%	6%	15%	16%
Adj. Flow (vph)	92	32	1288	75	67	1687
Shared Lane Traffic (%)						
Lane Group Flow (vph)	124	0	1288	75	67	1687
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Permitted Phases				2	6	
Detector Phase	8		2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5
Total Split (s)	22.5		33.0	33.0	9.5	42.5
Total Split (%)	34.6%		50.8%	50.8%	14.6%	65.4%
Maximum Green (s)	18.0		28.5	28.5	5.0	38.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	None	Min
Walk Time (s)	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0		0	0		0
Act Effct Green (s)	9.1		36.6	36.6	41.0	42.2
Actuated g/C Ratio	0.16		0.65	0.65	0.72	0.75
v/c Ratio	0.46		0.64	0.07	0.24	0.73
Control Delay	23.5		12.7	2.8	5.6	9.4
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	23.5		12.7	2.8	5.6	9.4
LOS	C		B	A	A	A
Approach Delay	23.5		12.2			9.2
Approach LOS	C		B			A
90th %ile Green (s)	13.1		28.5	28.5	5.0	38.0
90th %ile Term Code	Gap		Max	Max	Max	Max
70th %ile Green (s)	10.5		28.5	28.5	5.0	38.0
70th %ile Term Code	Gap		Max	Max	Max	Max
50th %ile Green (s)	8.8		28.5	28.5	5.0	38.0
50th %ile Term Code	Gap		Max	Max	Max	Max
30th %ile Green (s)	7.7		50.9	50.9	0.0	50.9
30th %ile Term Code	Gap		Dwell	Dwell	Skip	Dwell
10th %ile Green (s)	0.0		37.6	37.6	0.0	37.6
10th %ile Term Code	Skip		Dwell	Dwell	Skip	Dwell
Queue Length 50th (ft)	29		171	0	6	158
Queue Length 95th (ft)	55		#342	17	15	181
Internal Link Dist (ft)	596		535			590
Turn Bay Length (ft)				300	300	
Base Capacity (vph)	521		2012	1012	285	2259
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.24		0.64	0.07	0.24	0.75

Intersection Summary

Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 56.6	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 11.0	Intersection LOS: B
Intersection Capacity Utilization 51.8%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 60.1	
70th %ile Actuated Cycle: 57.5	
50th %ile Actuated Cycle: 55.8	
30th %ile Actuated Cycle: 67.6	
10th %ile Actuated Cycle: 42.1	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 140: Bakers Ferry Rd.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	35	7	7	13	7	26	29	1073	20	66	1329	152
Future Volume (vph)	35	7	7	13	7	26	29	1073	20	66	1329	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.925			0.923			0.997			0.985	
Flt Protected	0.950				0.986		0.950			0.950		
Satd. Flow (prot)	1399	1643	0	0	1321	0	1687	4536	0	1467	4583	0
Flt Permitted	0.997				0.897		0.950			0.950		
Satd. Flow (perm)	1468	1643	0	0	1202	0	1687	4536	0	1467	4583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			34			4			38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		409			537			753			584	
Travel Time (s)		9.3			12.2			17.1			13.3	
Peak Hour Factor	0.71	0.71	0.71	0.76	0.76	0.76	0.97	0.97	0.97	0.68	0.68	0.68
Heavy Vehicles (%)	29%	0%	14%	31%	0%	39%	7%	14%	15%	23%	12%	7%
Adj. Flow (vph)	49	10	10	17	9	34	30	1106	21	97	1954	224
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	20	0	0	60	0	30	1127	0	97	2178	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		9.8	36.2		16.2	42.6	
Total Split (%)	30.1%	30.1%		30.1%	30.1%		13.1%	48.3%		21.6%	56.8%	
Maximum Green (s)	18.1	18.1		18.1	18.1		5.3	31.7		11.7	38.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	8.3	8.3			8.1		5.4	40.4		8.9	45.4	
Actuated g/C Ratio	0.14	0.14			0.14		0.09	0.68		0.15	0.76	
v/c Ratio	0.24	0.08			0.31		0.20	0.37		0.45	0.62	
Control Delay	27.1	18.3			18.6		31.6	9.2		31.3	8.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	27.1	18.3			18.6		31.6	9.2		31.3	8.5	
LOS	C	B			B		C	A		C	A	
Approach Delay		24.5			18.6			9.8			9.5	
Approach LOS		C			B			A			A	
90th %ile Green (s)	12.4	12.4		12.4	12.4		5.3	31.7		11.7	38.1	
90th %ile Term Code	Gap	Gap		Hold	Hold		Max	Max		Max	Max	
70th %ile Green (s)	9.9	9.9		9.9	9.9		5.3	32.2		11.2	38.1	
70th %ile Term Code	Gap	Gap		Hold	Hold		Max	Hold		Gap	Max	
50th %ile Green (s)	8.0	8.0		8.0	8.0		0.0	24.6		9.0	38.1	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Hold		Gap	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	51.0		0.0	51.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	46.6		0.0	46.6	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	14	3			8		9	93		29	113	
Queue Length 95th (ft)	36	15			31		37	157		58	195	
Internal Link Dist (ft)		329			457			673			504	
Turn Bay Length (ft)							300			300		
Base Capacity (vph)	452	513			393		152	3190		292	3502	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.11	0.04			0.15		0.20	0.35		0.33	0.62	

Intersection Summary

Area Type: Other	
Cycle Length: 75	
Actuated Cycle Length: 59.6	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 10.0	Intersection LOS: B
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 69.3	
70th %ile Actuated Cycle: 66.8	
50th %ile Actuated Cycle: 55.1	
30th %ile Actuated Cycle: 55.5	
10th %ile Actuated Cycle: 51.1	

Splits and Phases: 150: Mendel Dr./Wharton Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	0	7	4	0	14	15	1225	11	9	1415	58
Future Volume (vph)	20	0	7	4	0	14	15	1225	11	9	1415	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	250		250	200		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.966			0.927				0.850		0.994	
Flt Protected		0.964			0.978		0.950			0.950		
Satd. Flow (prot)	0	1414	0	0	1273	0	1687	4550	1404	1467	4612	0
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	1466	0	0	1301	0	1687	4550	1404	1467	4612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		94			94				94		12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		720			447			1232			950	
Travel Time (s)		16.4			10.2			28.0			21.6	
Peak Hour Factor	0.57	0.57	0.57	0.25	0.75	0.75	0.91	0.91	0.91	0.73	0.73	0.73
Heavy Vehicles (%)	29%	0%	14%	31%	0%	39%	7%	14%	15%	23%	12%	7%
Adj. Flow (vph)	35	0	12	16	0	19	16	1346	12	12	1938	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	47	0	0	35	0	16	1346	12	12	2017	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8					2			
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		9.6	37.8	37.8	9.6	37.8	
Total Split (%)	32.3%	32.3%		32.3%	32.3%		13.7%	54.0%	54.0%	13.7%	54.0%	
Maximum Green (s)	18.1	18.1		18.1	18.1		5.1	33.3	33.3	5.1	33.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	Min	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)		5.9			5.9		5.4	25.8	25.8	5.4	37.9	
Actuated g/C Ratio		0.13			0.13		0.12	0.59	0.59	0.12	0.86	
v/c Ratio		0.17			0.14		0.08	0.50	0.01	0.07	0.51	
Control Delay		3.4			1.2		23.5	6.6	0.0	23.6	4.1	
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		3.4			1.2		23.5	6.6	0.0	23.6	4.1	
LOS		A			A		C	A	A	C	A	
Approach Delay		3.4			1.2			6.7			4.2	
Approach LOS		A			A			A			A	
90th %ile Green (s)	6.2	6.2		6.2	6.2		5.1	33.3	33.3	5.1	33.3	
90th %ile Term Code	Gap	Gap		Hold	Hold		Max	Max	Max	Max	Max	
70th %ile Green (s)	5.5	5.5		5.5	5.5		0.0	30.3	30.3	5.1	39.9	
70th %ile Term Code	Gap	Gap		Gap	Gap		Skip	Gap	Gap	Max	Hold	
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	25.6	25.6	5.1	35.2	
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Gap	Gap	Max	Hold	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	23.7	23.7	5.1	33.3	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold	Hold	Max	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	15.8	15.8	5.1	25.4	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold	Hold	Max	Gap	
Queue Length 50th (ft)		0			0		3	39	0	2	0	
Queue Length 95th (ft)		0			0		21	122	0	14	153	
Internal Link Dist (ft)		640			367			1152			870	
Turn Bay Length (ft)							250		250	200		
Base Capacity (vph)		693			621		207	3662	1148	180	3974	
Starvation Cap Reductn		0			0		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.07			0.06		0.08	0.37	0.01	0.07	0.51	

Intersection Summary

Area Type: Other	
Cycle Length: 70	
Actuated Cycle Length: 44	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 5.2	Intersection LOS: A
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 58.1	
70th %ile Actuated Cycle: 54.4	
50th %ile Actuated Cycle: 39.7	
30th %ile Actuated Cycle: 37.8	
10th %ile Actuated Cycle: 29.9	

Splits and Phases: 160: Marvin Miller Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Future Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt												
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1863	0	1770	5085	0	1770	5085	1863
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	1863	0	0	1863	0	1770	5085	0	1770	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.85	0.85	0.85	0.92	0.88	0.92	0.47	0.88	0.92	0.53	0.73	0.92
Adj. Flow (vph)	0	60	0	0	599	0	372	2764	0	32	2256	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	599	0	372	2764	0	32	2256	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA			NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	42.0	42.0		42.0	42.0		29.0	78.5		9.5	59.0	59.0
Total Split (%)	32.3%	32.3%		32.3%	32.3%		22.3%	60.4%		7.3%	45.4%	45.4%
Maximum Green (s)	37.5	37.5		37.5	37.5		24.5	74.0		5.0	54.5	54.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		37.5			37.5		24.5	77.8		5.0	54.5	
Actuated g/C Ratio		0.29			0.29		0.19	0.60		0.04	0.42	
v/c Ratio		0.11			1.12		1.12	0.91		0.47	1.06	
Control Delay		34.8			117.2		132.6	29.2		83.4	74.0	
Queue Delay		0.0			0.0		0.0	0.2		0.0	0.0	
Total Delay		34.8			117.2		132.6	29.5		83.4	74.0	
LOS		C			F		F	C		F	E	
Approach Delay		34.8			117.2			41.7			74.1	
Approach LOS		C			F			D			E	
90th %ile Green (s)	37.5	37.5		37.5	37.5		24.5	74.0		5.0	54.5	54.5
90th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
70th %ile Green (s)	37.5	37.5		37.5	37.5		24.5	74.0		5.0	54.5	54.5
70th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
50th %ile Green (s)	37.5	37.5		37.5	37.5		24.5	74.0		5.0	54.5	54.5
50th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
30th %ile Green (s)	37.5	37.5		37.5	37.5		24.5	83.5		0.0	54.5	54.5
30th %ile Term Code	Hold	Hold		Max	Max		Max	Hold		Skip	Max	Max
10th %ile Green (s)	37.5	37.5		37.5	37.5		24.5	83.5		0.0	54.5	54.5
10th %ile Term Code	Hold	Hold		Max	Max		Max	Hold		Skip	Max	Max
Queue Length 50th (ft)		37			~578		~359	771		27	~763	
Queue Length 95th (ft)		69			#780		204	813		36	557	
Internal Link Dist (ft)		669			848			870			895	
Turn Bay Length (ft)							200			300		
Base Capacity (vph)		537			537		333	3043		68	2131	
Starvation Cap Reductn		0			0		0	30		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.11			1.12		1.12	0.92		0.47	1.06	

Intersection Summary	
Area Type:	Other

Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 130	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 61.3	Intersection LOS: E
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 130	
70th %ile Actuated Cycle: 130	
50th %ile Actuated Cycle: 130	
30th %ile Actuated Cycle: 130	
10th %ile Actuated Cycle: 130	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 170: Patton Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	9	1311	4	84	1648	2	12	0	4	12	0	21
Future Volume (vph)	9	1311	4	84	1648	2	12	0	4	12	0	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.968			0.915	
Flt Protected	0.950			0.950				0.963			0.982	
Satd. Flow (prot)	1504	4427	0	902	5684	0	0	1600	0	0	939	0
Flt Permitted	0.950			0.950							0.869	
Satd. Flow (perm)	1504	4427	0	902	5684	0	0	1661	0	0	831	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						115			115	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			245			480			470	
Travel Time (s)		17.3			5.6			10.9			10.7	
Peak Hour Factor	0.95	0.95	0.95	0.79	0.79	0.79	0.77	0.77	0.77	0.72	0.72	0.72
Heavy Vehicles (%)	20%	17%	73%	100%	15%	9%	5%	0%	29%	100%	0%	71%
Adj. Flow (vph)	9	1380	4	106	2086	3	16	0	5	17	0	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1384	0	106	2089	0	0	21	0	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Permitted Phases							4			8		
Detector Phase	5	2		1	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.5	48.0		29.0	67.5		23.0	23.0		23.0	23.0	
Total Split (%)	9.5%	48.0%		29.0%	67.5%		23.0%	23.0%		23.0%	23.0%	
Maximum Green (s)	5.0	43.5		24.5	63.0		18.5	18.5		18.5	18.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.2	68.1		16.9	88.9			5.5			5.5	
Actuated g/C Ratio	0.06	0.68		0.17	0.89			0.06			0.06	
v/c Ratio	0.10	0.46		0.70	0.41			0.10			0.30	
Control Delay	46.0	9.7		60.7	2.3			1.1			4.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	46.0	9.7		60.7	2.3			1.1			4.9	
LOS	D	A		E	A			A			A	
Approach Delay		9.9			5.1			1.1			4.9	
Approach LOS		A			A			A			A	
90th %ile Green (s)	7.5	55.7		25.3	73.5		5.5	5.5		5.5	5.5	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	0.0	60.6		20.4	85.5		5.5	5.5		5.5	5.5	
70th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	0.0	64.0		17.0	85.5		5.5	5.5		5.5	5.5	
50th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	0.0	77.5		13.5	95.5		0.0	0.0		0.0	0.0	
30th %ile Term Code	Skip	Coord		Gap	Coord		Skip	Skip		Skip	Skip	
10th %ile Green (s)	0.0	82.6		8.4	95.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	6	153		62	43			0			0	
Queue Length 95th (ft)	22	238		114	91			0			0	
Internal Link Dist (ft)		680			165			400			390	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	93	3014		222	5053			401			247	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.10	0.46		0.48	0.41			0.05			0.19	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 87 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 6.9	Intersection LOS: A
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 180: Commerce Cir.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1372	1717	33	0	17
Future Volume (vph)	0	1372	1717	33	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	0.86	0.86	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	6408	6389	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	6408	6389	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		245	541		662	
Travel Time (s)		5.6	12.3		15.0	
Peak Hour Factor	0.96	0.96	0.78	0.78	0.53	0.53
Adj. Flow (vph)	0	1429	2201	42	0	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1429	2243	0	0	32
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1337	14	72	1704	1	15	0	52	1	0	0
Future Volume (vph)	6	1337	14	72	1704	1	15	0	52	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.86	0.86	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.895				
Flt Protected	0.950			0.950				0.989			0.950	
Satd. Flow (prot)	1770	6395	0	1770	6408	0	0	1649	0	0	1770	0
Flt Permitted	0.950			0.950				0.923			0.816	
Satd. Flow (perm)	1770	6395	0	1770	6408	0	0	1539	0	0	1520	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3						115				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		541			537			437			323	
Travel Time (s)		12.3			12.2			9.9			7.3	
Peak Hour Factor	0.99	0.99	0.99	0.78	0.78	0.78	0.86	0.86	0.86	0.50	0.50	0.50
Adj. Flow (vph)	6	1351	14	92	2185	1	17	0	60	2	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	1365	0	92	2186	0	0	77	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	11.0	54.0		21.0	64.0		25.0	25.0		25.0	25.0	
Total Split (%)	11.0%	54.0%		21.0%	64.0%		25.0%	25.0%		25.0%	25.0%	
Maximum Green (s)	6.5	49.5		16.5	59.5		20.5	20.5		20.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	C-Max		Min	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.0	72.0		10.5	76.6			6.0			6.0	
Actuated g/C Ratio	0.06	0.72		0.10	0.77			0.06			0.06	
v/c Ratio	0.06	0.30		0.49	0.45			0.39			0.02	
Control Delay	40.3	3.3		54.3	2.0			8.8			44.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	40.3	3.3		54.3	2.1			8.8			44.0	
LOS	D	A		D	A			A			D	
Approach Delay		3.5			4.2			8.8			44.0	
Approach LOS		A			A			A			D	
90th %ile Green (s)	6.8	64.5		14.6	72.3		7.4	7.4		7.4	7.4	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	6.2	68.4		12.2	74.4		5.9	5.9		5.9	5.9	
70th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Hold	Hold	
50th %ile Green (s)	5.8	70.4		10.5	75.1		5.6	5.6		5.6	5.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Hold	Hold	
30th %ile Green (s)	5.5	72.1		8.9	75.5		5.5	5.5		5.5	5.5	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	5.5	84.6		6.4	85.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	4	20		61	25			0			1	
Queue Length 95th (ft)	m9	57		m86	65			16			5	
Internal Link Dist (ft)		461			457			357			243	
Turn Bay Length (ft)	300			150								
Base Capacity (vph)	116	4605		292	4905			406			311	
Starvation Cap Reductn	0	0		0	582			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.05	0.30		0.32	0.51			0.19			0.01	

Intersection Summary	
Area Type:	Other

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 81 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 4.0	Intersection LOS: A
Intersection Capacity Utilization 44.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: Shirley Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	326	0	373	0	0	0	0	792	1211	579	1548	0
Future Volume (vph)	326	0	373	0	0	0	0	792	1211	579	1548	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	225		0	0		0
Storage Lanes	2		1	0		0	0		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.88	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	3242	0	1524	0	0	0	0	5836	2538	1719	4631	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3242	0	1524	0	0	0	0	5836	2538	1719	4631	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65						881			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		758			734			537			524	
Travel Time (s)		17.2			16.7			12.2			11.9	
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.97	0.97	0.97	0.94	0.94	0.94
Heavy Vehicles (%)	8%	2%	6%	2%	2%	2%	12%	12%	12%	5%	12%	2%
Adj. Flow (vph)	370	0	424	0	0	0	0	816	1248	616	1647	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	370	0	424	0	0	0	0	816	1248	616	1647	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1		1					2	1	1	2	
Detector Template	Left		Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20		20					100	20	20	100	
Trailing Detector (ft)	0		0					0	0	0	0	
Detector 1 Position(ft)	0		0					0	0	0	0	
Detector 1 Size(ft)	20		20					6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot		Perm					NA	Perm	Prot	NA	
Protected Phases	7							2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases			7						2			
Detector Phase	7		7					2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5		9.5					22.5	22.5	9.5	22.5	
Total Split (s)	28.0		28.0					32.0	32.0	40.0	72.0	
Total Split (%)	28.0%		28.0%					32.0%	32.0%	40.0%	72.0%	
Maximum Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
Yellow Time (s)	3.5		3.5					3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5					4.5	4.5	4.5	4.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Recall Mode	None		None					C-Min	C-Min	None	C-Min	
Walk Time (s)								7.0	7.0		7.0	
Flash Dont Walk (s)								11.0	11.0		11.0	
Pedestrian Calls (#/hr)								0	0		0	
Act Effct Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
Actuated g/C Ratio	0.24		0.24					0.28	0.28	0.36	0.68	
v/c Ratio	0.49		1.04					0.51	0.93	1.01	0.53	
Control Delay	35.6		89.1					24.2	24.1	66.6	6.3	
Queue Delay	0.0		0.0					0.0	5.4	0.0	0.2	
Total Delay	35.6		89.1					24.2	29.6	66.6	6.5	
LOS	D		F					C	C	E	A	
Approach Delay		64.1						27.5			22.9	
Approach LOS		E						C			C	
90th %ile Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
90th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
70th %ile Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
70th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
50th %ile Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
50th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
30th %ile Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
30th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
10th %ile Green (s)	23.5		23.5					27.5	27.5	35.5	67.5	
10th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
Queue Length 50th (ft)	105		~260					127	228	~378	151	
Queue Length 95th (ft)	146		#434					105	#327	#620	155	
Internal Link Dist (ft)		678			654			457			444	
Turn Bay Length (ft)												
Base Capacity (vph)	761		407					1604	1336	610	3125	
Starvation Cap Reductn	0		0					0	66	0	610	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.49		1.04					0.51	0.98	1.01	0.65	

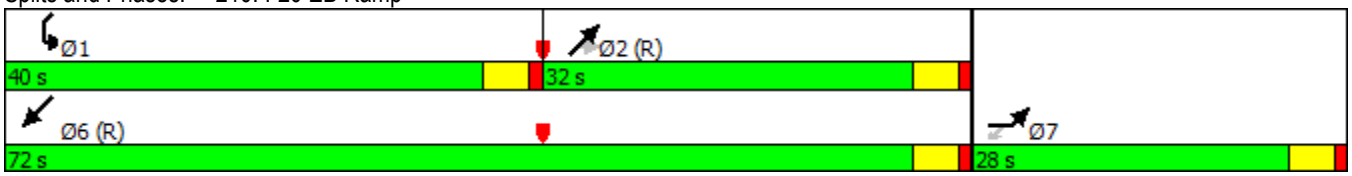
Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 7 (7%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 31.1	Intersection LOS: C
Intersection Capacity Utilization 95.0%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 210: I-20 EB Ramp



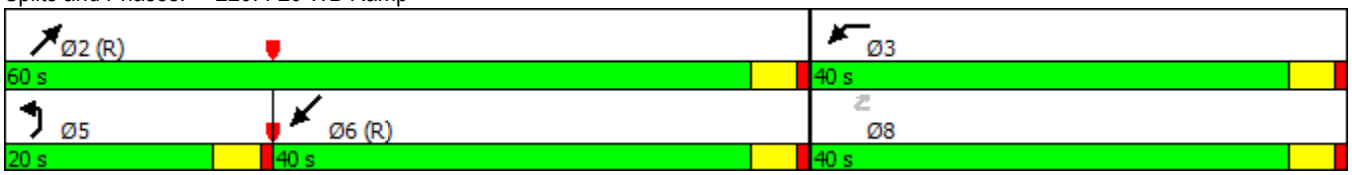
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1000	0	326	104	964	0	0	1158	192
Future Volume (vph)	0	0	0	1000	0	326	104	964	0	0	1158	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		400	0		0	0		0
Storage Lanes	0		0	3		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.91	1.00	1.00	0.86	0.86
Frt						0.850					0.979	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	4545	0	1524	1517	4715	0	0	5972	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	4545	0	1524	1517	4715	0	0	5972	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						89					46	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			795			524			744	
Travel Time (s)		11.1			18.1			11.9			16.9	
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	12%	2%	6%	19%	10%	2%	16%	8%	2%
Adj. Flow (vph)	0	0	0	1099	0	358	113	1048	0	0	1287	213
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	1099	0	358	113	1048	0	0	1500	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1		1	1	2			2	
Detector Template				Left		Right	Left	Thru			Thru	
Leading Detector (ft)				20		20	20	100			100	
Trailing Detector (ft)				0		0	0	0			0	
Detector 1 Position(ft)				0		0	0	0			0	
Detector 1 Size(ft)				20		20	20	6			6	
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0		0.0	0.0	0.0			0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type				Prot		Perm	Prot	NA			NA	
Protected Phases				3			5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases						8						
Detector Phase				3		8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0		5.0	5.0	5.0			5.0	
Minimum Split (s)				9.5		22.5	9.5	22.5			22.5	
Total Split (s)				40.0		40.0	20.0	60.0			40.0	
Total Split (%)				40.0%		40.0%	20.0%	60.0%			40.0%	
Maximum Green (s)				35.5		35.5	15.5	55.5			35.5	
Yellow Time (s)				3.5		3.5	3.5	3.5			3.5	
All-Red Time (s)				1.0		1.0	1.0	1.0			1.0	
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	
Total Lost Time (s)				4.5		4.5	4.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	
Recall Mode				None		None	None	C-Min			C-Min	
Walk Time (s)						7.0		7.0			7.0	
Flash Dont Walk (s)						11.0		11.0			11.0	
Pedestrian Calls (#/hr)						0		0			0	
Act Effct Green (s)				30.6		30.6	12.2	60.4			43.7	
Actuated g/C Ratio				0.31		0.31	0.12	0.60			0.44	
v/c Ratio				0.79		0.68	0.61	0.37			0.57	
Control Delay				36.1		29.0	48.0	1.9			20.5	
Queue Delay				0.1		0.0	0.0	0.0			0.0	
Total Delay				36.2		29.0	48.0	1.9			20.5	
LOS				D		C	D	A			C	
Approach Delay					34.4			6.4			20.5	
Approach LOS					C			A			C	
90th %ile Green (s)				35.5		35.5	15.5	55.5			35.5	
90th %ile Term Code				Max		Hold	Max	Coord			Coord	
70th %ile Green (s)				33.0		33.0	14.8	58.0			38.7	
70th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
50th %ile Green (s)				31.0		31.0	12.7	60.0			42.8	
50th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
30th %ile Green (s)				28.8		28.8	10.6	62.2			47.1	
30th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
10th %ile Green (s)				24.9		24.9	7.4	66.1			54.2	
10th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
Queue Length 50th (ft)				225		149	32	0			172	
Queue Length 95th (ft)				257		236	97	0			218	
Internal Link Dist (ft)		407			715			444			664	
Turn Bay Length (ft)						400						
Base Capacity (vph)				1613		598	235	2845			2633	
Starvation Cap Reductn				0		0	0	0			0	
Spillback Cap Reductn				49		0	0	0			52	
Storage Cap Reductn				0		0	0	0			0	
Reduced v/c Ratio				0.70		0.60	0.48	0.37			0.58	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 44 (44%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 21.4	Intersection LOS: C
Intersection Capacity Utilization 95.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 220: I-20 WB Ramp



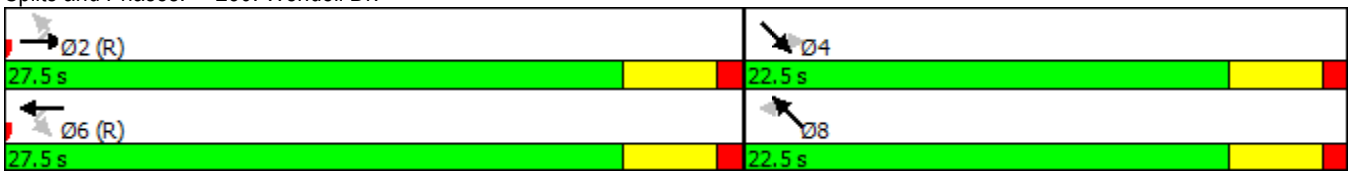
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	76	934	110	22	736	25	10	3	24	68	6	12
Future Volume (vph)	76	934	110	22	736	25	10	3	24	68	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.995			0.913			0.982	
Flt Protected	0.950			0.950				0.987			0.962	
Satd. Flow (prot)	1597	4658	0	1805	4613	0	0	1570	0	0	1572	0
Flt Permitted	0.316			0.238				0.908			0.731	
Satd. Flow (perm)	531	4658	0	452	4613	0	0	1444	0	0	1195	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			13			38			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		744			1498			395			449	
Travel Time (s)		16.9			34.0			9.0			10.2	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.64	0.64	0.64	0.89	0.89	0.89
Heavy Vehicles (%)	13%	10%	6%	0%	12%	8%	2%	2%	13%	16%	17%	2%
Adj. Flow (vph)	83	1015	120	25	836	28	16	5	38	76	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	1135	0	25	864	0	0	59	0	0	96	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	27.5	27.5		27.5	27.5		22.5	22.5		22.5	22.5	
Total Split (%)	55.0%	55.0%		55.0%	55.0%		45.0%	45.0%		45.0%	45.0%	
Maximum Green (s)	23.0	23.0		23.0	23.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	38.3	38.3		38.3	38.3			8.5			8.8	
Actuated g/C Ratio	0.77	0.77		0.77	0.77			0.17			0.18	
v/c Ratio	0.20	0.32		0.07	0.24			0.21			0.43	
Control Delay	5.4	3.8		5.4	4.2			10.6			21.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.4	3.8		5.4	4.2			10.6			21.7	
LOS	A	A		A	A			B			C	
Approach Delay		3.9			4.3			10.6			21.7	
Approach LOS		A			A			B			C	
90th %ile Green (s)	28.2	28.2		28.2	28.2		12.8	12.8		12.8	12.8	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	30.7	30.7		30.7	30.7		10.3	10.3		10.3	10.3	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	32.4	32.4		32.4	32.4		8.6	8.6		8.6	8.6	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	45.5	45.5		45.5	45.5		0.0	0.0		0.0	0.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
10th %ile Green (s)	45.5	45.5		45.5	45.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	19	134		3	61			5			22	
Queue Length 95th (ft)	m54	169		m4	m65			15			50	
Internal Link Dist (ft)		664			1418			315			369	
Turn Bay Length (ft)	150			200								
Base Capacity (vph)	406	3577		345	3533			544			438	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.20	0.32		0.07	0.24			0.11			0.22	

Intersection Summary

Area Type:	Other
Cycle Length: 50	
Actuated Cycle Length: 50	
Offset: 6 (12%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 47.4%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 230: Wendell Dr.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Future Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	3034	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	3034	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			301			213			166			213
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.91	0.91	0.91	0.81	0.81	0.81	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	7%	3%	4%	10%	2%	5%	5%	12%	11%	14%	19%	5%
Adj. Flow (vph)	366	931	913	147	319	25	375	758	166	36	403	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	366	931	913	147	319	25	375	758	166	36	403	79
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.3	50.0	50.0	10.0	37.7	37.7	16.6	30.5	30.5	9.5	23.4	23.4
Total Split (%)	22.3%	50.0%	50.0%	10.0%	37.7%	37.7%	16.6%	30.5%	30.5%	9.5%	23.4%	23.4%
Maximum Green (s)	17.8	45.5	45.5	5.5	33.2	33.2	12.1	26.0	26.0	5.0	18.9	18.9
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	15.7	45.8	45.8	6.0	36.0	36.0	12.1	29.1	29.1	5.0	18.2	18.2
Actuated g/C Ratio	0.16	0.46	0.46	0.06	0.36	0.36	0.12	0.29	0.29	0.05	0.18	0.18
v/c Ratio	0.71	0.58	1.05	0.77	0.25	0.04	0.93	0.81	0.31	0.24	0.73	0.17
Control Delay	48.0	21.9	62.9	73.7	23.9	0.1	70.2	33.6	4.6	38.5	38.3	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	21.9	62.9	73.7	23.9	0.1	70.2	33.6	4.6	38.5	38.3	5.6
LOS	D	C	E	E	C	A	E	C	A	D	D	A
Approach Delay		43.2			37.6			40.4			33.3	
Approach LOS		D			D			D			C	
90th %ile Green (s)	17.8	45.5	45.5	5.5	33.2	33.2	12.1	26.0	26.0	5.0	18.9	18.9
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	17.8	45.5	45.5	5.5	33.2	33.2	12.1	26.0	26.0	5.0	18.9	18.9
70th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	16.3	45.5	45.5	5.5	34.7	34.7	12.1	26.0	26.0	5.0	18.9	18.9
50th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	14.6	45.5	45.5	5.5	36.4	36.4	12.1	35.5	35.5	0.0	18.9	18.9
30th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
10th %ile Green (s)	12.0	46.8	46.8	7.9	42.7	42.7	12.1	31.8	31.8	0.0	15.2	15.2
10th %ile Term Code	Gap	Max	Max	Gap	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
Queue Length 50th (ft)	114	225	~525	48	75	0	98	254	25	10	135	7
Queue Length 95th (ft)	160	287	#765	#88	100	0	#201	#366	17	24	182	21
Internal Link Dist (ft)		1021			1100			1418			1649	
Turn Bay Length (ft)				250		400	350			300		
Base Capacity (vph)	582	1603	873	190	1275	690	403	936	540	153	573	463
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.58	1.05	0.77	0.25	0.04	0.93	0.81	0.31	0.24	0.70	0.17

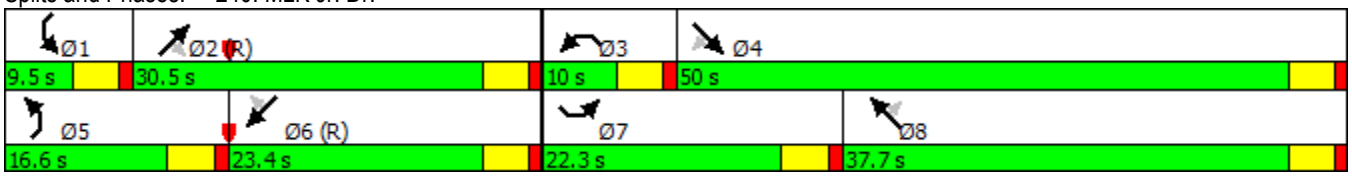
Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 40.6	Intersection LOS: D
Intersection Capacity Utilization 77.6%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 240: MLK Jr. Dr.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	4	21	45	20	63	1064	20	8	332	20
Future Volume (vph)	4	4	4	21	45	20	63	1064	20	8	332	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	150		250
Storage Lanes	0		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.954				0.850			0.850
Flt Protected		0.976		0.950			0.950			0.950		
Satd. Flow (prot)	0	1818	1583	1770	1777	0	1770	3008	1583	1770	3008	1583
Flt Permitted		0.912		0.638			0.464			0.117		
Satd. Flow (perm)	0	1699	1583	1188	1777	0	864	3008	1583	218	3008	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115		21				115			115
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		617			886			1729			1350	
Travel Time (s)		14.0			20.1			39.3			30.7	
Peak Hour Factor	0.50	0.50	0.50	0.66	0.94	0.94	0.79	0.84	0.84	0.50	0.81	0.81
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	20%	2%	2%	20%	2%
Adj. Flow (vph)	8	8	8	32	48	21	80	1267	24	16	410	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	8	32	69	0	80	1267	24	16	410	25
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		6		5	2		7	4		3	8	

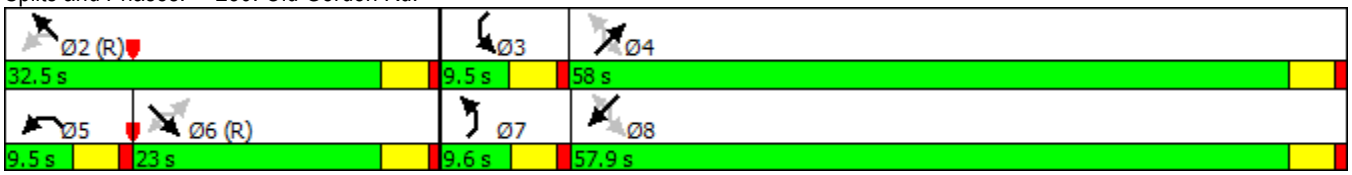
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6		6	2			4		4	8		8
Detector Phase	6	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	9.5	32.5		9.6	58.0	58.0	9.5	57.9	57.9
Total Split (%)	23.0%	23.0%	23.0%	9.5%	32.5%		9.6%	58.0%	58.0%	9.5%	57.9%	57.9%
Maximum Green (s)	18.5	18.5	18.5	5.0	28.0		5.1	53.5	53.5	5.0	53.4	53.4
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0			0	0		0	0
Act Effct Green (s)		30.8	30.8	36.8	36.8		52.4	50.4	50.4	50.5	46.5	46.5
Actuated g/C Ratio		0.31	0.31	0.37	0.37		0.52	0.50	0.50	0.50	0.46	0.46
v/c Ratio		0.03	0.01	0.07	0.10		0.16	0.84	0.03	0.09	0.29	0.03
Control Delay		32.2	0.0	25.0	18.9		2.3	11.3	0.1	9.0	16.6	0.1
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		32.2	0.0	25.0	18.9		2.3	11.3	0.1	9.0	16.6	0.1
LOS		C	A	C	B		A	B	A	A	B	A
Approach Delay		21.5			20.8			10.5			15.5	
Approach LOS		C			C			B			B	
90th %ile Green (s)	18.5	18.5	18.5	5.0	28.0		5.1	53.5	53.5	5.0	53.4	53.4
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Max	Max	Max	Hold	Hold
70th %ile Green (s)	18.5	18.5	18.5	5.0	28.0		5.1	53.5	53.5	5.0	53.4	53.4
70th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Max	Max	Max	Hold	Hold
50th %ile Green (s)	27.6	27.6	27.6	6.6	38.7		5.1	52.3	52.3	0.0	42.7	42.7
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Max	Gap	Gap	Skip	Hold	Hold
30th %ile Green (s)	41.8	41.8	41.8	0.0	41.8		5.1	49.2	49.2	0.0	39.6	39.6
30th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Gap	Gap	Skip	Hold	Hold
10th %ile Green (s)	47.6	47.6	47.6	0.0	47.6		0.0	43.4	43.4	0.0	43.4	43.4
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Skip	Gap	Gap	Skip	Hold	Hold
Queue Length 50th (ft)		7	0	13	19		5	42	0	5	88	0
Queue Length 95th (ft)		15	0	28	56		m4	39	m0	6	87	0
Internal Link Dist (ft)		537			806			1649			1270	
Turn Bay Length (ft)							150			150		250
Base Capacity (vph)		523	567	469	667		499	1609	900	187	1606	898
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.01	0.07	0.10		0.16	0.79	0.03	0.09	0.26	0.03

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 250: Old Gordon Rd.



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	102	102	200	800	350	0
Future Volume (vph)	102	102	200	800	350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950		0.950			
Satd. Flow (prot)	902	808	950	3008	3008	1863
Flt Permitted	0.950		0.434			
Satd. Flow (perm)	902	808	434	3008	3008	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		111				
Link Speed (mph)	30			30	30	
Link Distance (ft)	912			1889	1254	
Travel Time (s)	20.7			42.9	28.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	100%	100%	90%	20%	20%	2%
Adj. Flow (vph)	111	111	217	870	380	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	111	111	217	870	380	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						

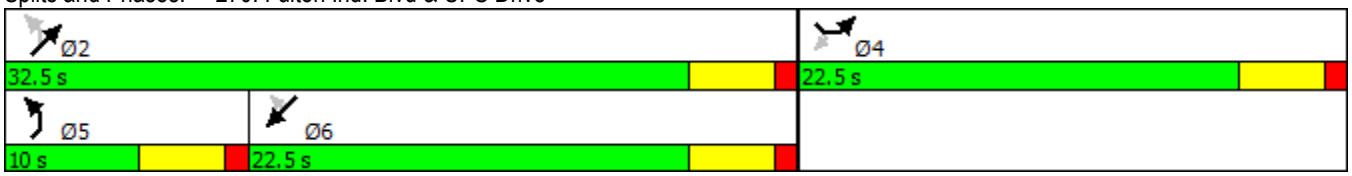
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	10.0	32.5	22.5	22.5
Total Split (%)	40.9%	40.9%	18.2%	59.1%	40.9%	40.9%
Maximum Green (s)	18.0	18.0	5.5	28.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	11.2	11.2	31.3	32.2	21.2	
Actuated g/C Ratio	0.23	0.23	0.63	0.65	0.43	
v/c Ratio	0.54	0.41	0.65	0.44	0.29	
Control Delay	26.4	8.8	21.9	7.4	12.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	26.4	8.8	21.9	7.4	12.2	
LOS	C	A	C	A	B	
Approach Delay	17.6			10.3	12.2	
Approach LOS	B			B	B	
90th %ile Green (s)	18.0	18.0	5.5	28.0	18.0	18.0
90th %ile Term Code	Max	Max	Max	MaxR	MaxR	MaxR
70th %ile Green (s)	13.7	13.7	5.5	28.0	18.0	18.0
70th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
50th %ile Green (s)	11.0	11.0	5.5	28.0	18.0	18.0
50th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
30th %ile Green (s)	8.6	8.6	5.5	28.0	18.0	18.0
30th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
10th %ile Green (s)	0.0	0.0	5.5	43.0	33.0	33.0
10th %ile Term Code	Skip	Skip	Max	Dwell	Dwell	Dwell
Queue Length 50th (ft)	27	0	28	62	37	
Queue Length 95th (ft)	65	29	#138	140	80	
Internal Link Dist (ft)	832			1809	1174	
Turn Bay Length (ft)						
Base Capacity (vph)	330	366	332	1960	1291	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.34	0.30	0.65	0.44	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 55
Actuated Cycle Length: 49.4

Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 11.7	Intersection LOS: B
Intersection Capacity Utilization 37.7%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 55	
70th %ile Actuated Cycle: 50.7	
50th %ile Actuated Cycle: 48	
30th %ile Actuated Cycle: 45.6	
10th %ile Actuated Cycle: 47.5	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 270: Fulton Ind. Blvd & UPS Drive



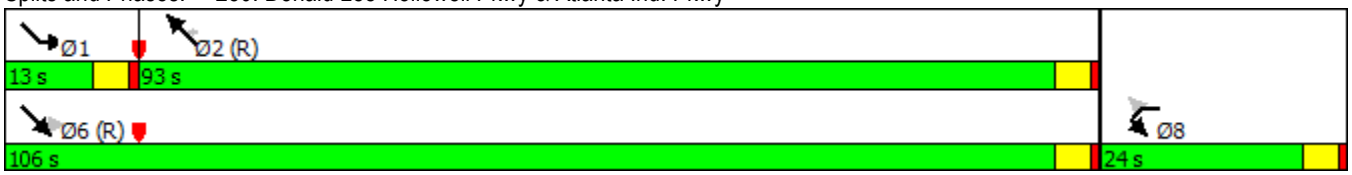
Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	45	0	99	1533	741	0
Future Volume (vph)	45	0	99	1533	741	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300			0
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1863	1570	3139	3139	1652
Flt Permitted	0.950		0.318			
Satd. Flow (perm)	1770	1863	525	3139	3139	1652
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1300			1130	416	
Travel Time (s)	29.5			25.7	9.5	
Peak Hour Factor	0.72	0.72	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	15%	15%	15%	15%
Adj. Flow (vph)	63	0	108	1666	805	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	63	0	108	1666	805	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	8		1	6	2	

Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Permitted Phases		8	6			2
Detector Phase	8	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	13.0	106.0	93.0	93.0
Total Split (%)	18.5%	18.5%	10.0%	81.5%	71.5%	71.5%
Maximum Green (s)	19.5	19.5	8.5	101.5	88.5	88.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	10.0		113.1	114.0	101.7	
Actuated g/C Ratio	0.08		0.87	0.88	0.78	
v/c Ratio	0.46		0.21	0.61	0.33	
Control Delay	67.6		2.6	4.1	2.0	
Queue Delay	0.5		0.0	0.1	0.1	
Total Delay	68.1		2.6	4.2	2.1	
LOS	E		A	A	A	
Approach Delay	68.1			4.1	2.1	
Approach LOS	E			A	A	
90th %ile Green (s)	13.9	13.9	8.4	107.1	94.2	94.2
90th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
70th %ile Green (s)	11.6	11.6	7.4	109.4	97.5	97.5
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	10.0	10.0	6.9	111.0	99.6	99.6
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	8.4	8.4	6.4	112.6	101.7	101.7
30th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
10th %ile Green (s)	0.0	0.0	5.6	125.5	115.4	115.4
10th %ile Term Code	Skip	Skip	Gap	Coord	Coord	Coord
Queue Length 50th (ft)	52		11	168	22	
Queue Length 95th (ft)	77		24	267	133	
Internal Link Dist (ft)	1220			1050	336	
Turn Bay Length (ft)			300			
Base Capacity (vph)	265		525	2753	2455	
Starvation Cap Reductn	0		0	0	659	
Spillback Cap Reductn	59		0	245	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.31		0.21	0.66	0.45	

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 32 (25%), Referenced to phase 2:NWT and 6:SETL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 280: Donald Lee Hollowell Pkwy & Atlanta Ind. Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	176	1568	200	88	728	0	60	311	0	49	52	50
Future Volume (vph)	176	1568	200	88	728	0	60	311	0	49	52	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		200	300		0	300		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.929	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1570	3139	1404	1570	3139	0	1504	3008	0	1570	2916	0
Flt Permitted	0.298			0.078			0.631			0.318		
Satd. Flow (perm)	492	3139	1404	129	3139	0	999	3008	0	525	2916	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			196								64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			899			1051			1138	
Travel Time (s)		9.5			20.4			23.9			25.9	
Peak Hour Factor	0.80	0.95	0.92	0.92	0.96	0.92	0.83	0.90	0.92	0.72	0.72	0.78
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	20%	20%	20%	15%	15%	15%
Adj. Flow (vph)	220	1651	217	96	758	0	72	346	0	68	72	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	220	1651	217	96	758	0	72	346	0	68	136	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	

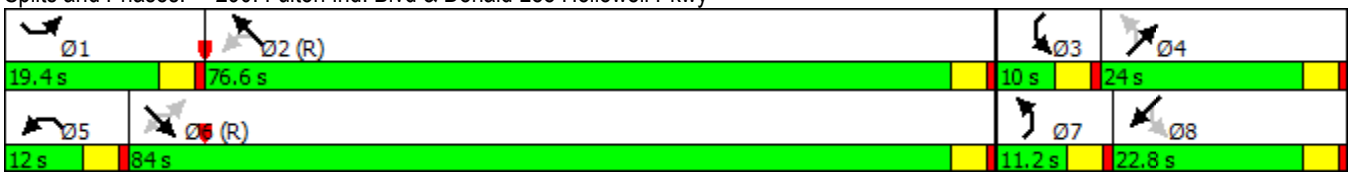
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	19.4	84.0	84.0	12.0	76.6		11.2	24.0		10.0	22.8	
Total Split (%)	14.9%	64.6%	64.6%	9.2%	58.9%		8.6%	18.5%		7.7%	17.5%	
Maximum Green (s)	14.9	79.5	79.5	7.5	72.1		6.7	19.5		5.5	18.3	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	93.2	82.4	82.4	85.2	78.1		24.1	18.3		22.5	17.5	
Actuated g/C Ratio	0.72	0.63	0.63	0.66	0.60		0.19	0.14		0.17	0.13	
v/c Ratio	0.49	0.83	0.23	0.59	0.40		0.34	0.82		0.49	0.30	
Control Delay	9.4	21.7	2.1	34.8	9.5		46.5	70.1		54.4	28.7	
Queue Delay	0.0	0.9	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	9.4	22.6	2.1	34.8	9.5		46.5	70.1		54.4	28.7	
LOS	A	C	A	C	A		D	E		D	C	
Approach Delay		19.1			12.3			66.0			37.3	
Approach LOS		B			B			E			D	
90th %ile Green (s)	14.9	79.5	79.5	7.5	72.1		6.7	19.5		5.5	18.3	
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
70th %ile Green (s)	13.1	79.5	79.5	7.5	73.9		6.7	19.5		5.5	18.3	
70th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
50th %ile Green (s)	11.7	79.5	79.5	7.5	75.3		6.7	19.5		5.5	18.3	
50th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
30th %ile Green (s)	10.6	78.2	78.2	7.3	74.9		8.8	18.1		8.4	17.7	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap		Gap	Hold	
10th %ile Green (s)	7.4	95.5	95.5	6.0	94.1		0.0	15.0		0.0	15.0	
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Skip	Gap		Skip	Hold	
Queue Length 50th (ft)	50	582	2	16	62		50	149		47	28	
Queue Length 95th (ft)	74	514	35	#95	141		86	#207		70	43	
Internal Link Dist (ft)		336			819			971			1058	
Turn Bay Length (ft)	200		200	300			300			200		
Base Capacity (vph)	479	1996	964	167	1884		212	451		140	465	
Starvation Cap Reductn	0	136	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.89	0.23	0.57	0.40		0.34	0.77		0.49	0.29	

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 102 (78%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 24.0	Intersection LOS: C
Intersection Capacity Utilization 76.0%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 290: Fulton Ind. Blvd & Donald Lee Hollowell Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	8	1234	31	38	1038	14	13	31	62	18	14	12
Future Volume (vph)	8	1234	31	38	1038	14	13	31	62	18	14	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.998			0.921			0.962	
Flt Protected	0.950			0.950				0.994			0.980	
Satd. Flow (prot)	1444	3082	0	1719	3190	0	0	1696	0	0	1695	0
Flt Permitted	0.212			0.179				0.964			0.573	
Satd. Flow (perm)	322	3082	0	324	3190	0	0	1644	0	0	991	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2			48			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		899			304			783			722	
Travel Time (s)		20.4			6.9			17.8			16.4	
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.93	0.93	0.93	0.72	0.72	0.72
Heavy Vehicles (%)	25%	17%	3%	5%	13%	7%	2%	2%	3%	11%	2%	2%
Adj. Flow (vph)	8	1259	32	45	1221	16	14	33	67	25	19	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	1291	0	45	1237	0	0	114	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	

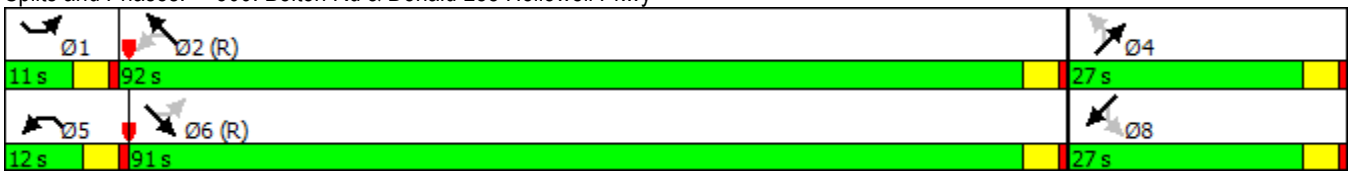
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	11.0	91.0		12.0	92.0		27.0	27.0		27.0	27.0	
Total Split (%)	8.5%	70.0%		9.2%	70.8%		20.8%	20.8%		20.8%	20.8%	
Maximum Green (s)	6.5	86.5		7.5	87.5		22.5	22.5		22.5	22.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	106.1	101.6		109.5	108.1			10.8			10.8	
Actuated g/C Ratio	0.82	0.78		0.84	0.83			0.08			0.08	
v/c Ratio	0.03	0.54		0.13	0.47			0.63			0.65	
Control Delay	0.5	1.5		2.7	4.9			48.5			75.1	
Queue Delay	0.0	0.1		0.0	0.3			0.0			0.0	
Total Delay	0.5	1.6		2.7	5.3			48.5			75.1	
LOS	A	A		A	A			D			E	
Approach Delay		1.6			5.2			48.5			75.1	
Approach LOS		A			A			D			E	
90th %ile Green (s)	5.9	93.1		6.9	94.1		16.5	16.5		16.5	16.5	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	0.0	97.2		6.3	108.0		13.0	13.0		13.0	13.0	
70th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	99.8		6.0	110.3		10.7	10.7		10.7	10.7	
50th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	102.4		5.7	112.6		8.4	8.4		8.4	8.4	
30th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	115.5		0.0	115.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Skip	Coord		Skip	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	1	49		4	78			54			40	
Queue Length 95th (ft)	m0	11		m11	354			113			65	
Internal Link Dist (ft)		819			224			703			642	
Turn Bay Length (ft)	400			150								
Base Capacity (vph)	320	2409		353	2652			324			182	
Starvation Cap Reductn	0	0		0	747			0			0	
Spillback Cap Reductn	0	225		0	0			3			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.03	0.59		0.13	0.65			0.36			0.34	

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 22 (17%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 300: Bolton Rd & Donald Lee Hollowell Pkwy



Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	0	0	0	843	526	158	636	0	76	0	419
Future Volume (vph)	0	0	0	843	526	158	636	0	76	0	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00
Frt				0.942							0.850
Flt Protected						0.950			0.950		
Satd. Flow (prot)	0	0	0	3011	0	1262	3252	0	2736	0	1417
Flt Permitted						0.088			0.950		
Satd. Flow (perm)	0	0	0	3011	0	117	3252	0	2736	0	1417
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				154							308
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	922			304			568			593	
Travel Time (s)	21.0			6.9			12.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.87	0.87	0.87
Heavy Vehicles (%)	2%	2%	2%	11%	16%	43%	11%	2%	28%	2%	14%
Adj. Flow (vph)	0	0	0	916	572	165	663	0	87	0	482
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	0	1488	0	165	663	0	87	0	482
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			24			24			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors				2		1	2		1		1
Detector Template				Thru		Left	Thru		Left		Right
Leading Detector (ft)				100		20	100		20		20
Trailing Detector (ft)				0		0	0		0		0
Detector 1 Position(ft)				0		0	0		0		0
Detector 1 Size(ft)				6		20	6		20		20
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type				NA		pm+pt	NA		Prot		Perm
Protected Phases				6		5	2		3		
Permitted Phases						2					8
Detector Phase				6		5	2		3		8
Switch Phase											

Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Minimum Initial (s)				5.0		5.0	5.0		5.0		5.0
Minimum Split (s)				22.5		9.5	22.5		9.5		22.5
Total Split (s)				71.0		22.0	93.0		37.0		37.0
Total Split (%)				54.6%		16.9%	71.5%		28.5%		28.5%
Maximum Green (s)				66.5		17.5	88.5		32.5		32.5
Yellow Time (s)				3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)				0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)				4.5		4.5	4.5		4.5		4.5
Lead/Lag				Lag		Lead					
Lead-Lag Optimize?				Yes		Yes					
Vehicle Extension (s)				3.0		3.0	3.0		3.0		3.0
Recall Mode				C-Min		None	C-Min		None		None
Walk Time (s)				7.0			7.0				7.0
Flash Dont Walk (s)				11.0			11.0				11.0
Pedestrian Calls (#/hr)				0			0				0
Act Effct Green (s)				76.9		96.7	96.7		24.3		24.3
Actuated g/C Ratio				0.59		0.74	0.74		0.19		0.19
v/c Ratio				0.81		0.75	0.27		0.17		0.94
Control Delay				13.3		45.7	7.3		42.2		44.4
Queue Delay				0.0		0.0	0.0		0.0		0.6
Total Delay				13.3		45.7	7.3		42.2		44.9
LOS				B		D	A		D		D
Approach Delay				13.3			15.0			44.5	
Approach LOS				B			B			D	
90th %ile Green (s)				66.5		17.5	88.5		32.5		32.5
90th %ile Term Code				Coord		Max	Coord		Hold		Max
70th %ile Green (s)				66.5		17.5	88.5		32.5		32.5
70th %ile Term Code				Coord		Max	Coord		Hold		Max
50th %ile Green (s)				71.0		18.6	94.1		26.9		26.9
50th %ile Term Code				Coord		Gap	Coord		Hold		Gap
30th %ile Green (s)				82.2		14.4	101.1		19.9		19.9
30th %ile Term Code				Coord		Gap	Coord		Hold		Gap
10th %ile Green (s)				98.5		8.2	111.2		9.8		9.8
10th %ile Term Code				Coord		Gap	Coord		Hold		Gap
Queue Length 50th (ft)				220		71	96		31		158
Queue Length 95th (ft)				#610		m#149	121		50		278
Internal Link Dist (ft)	842			224			488			513	
Turn Bay Length (ft)											
Base Capacity (vph)				1844		243	2418		684		585
Starvation Cap Reductn				0		0	0		0		0
Spillback Cap Reductn				0		0	136		0		12
Storage Cap Reductn				0		0	0		0		0
Reduced v/c Ratio				0.81		0.68	0.29		0.13		0.84

Intersection Summary

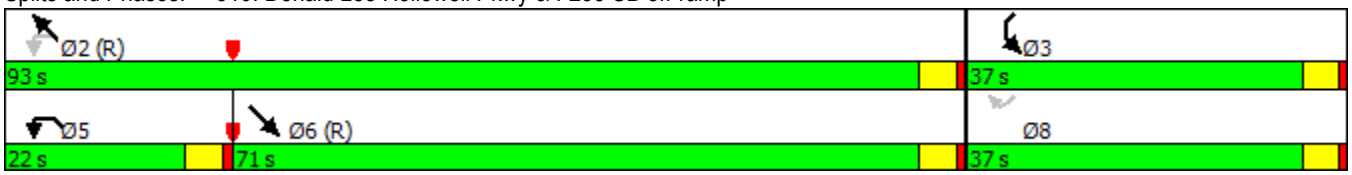
Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130

Offset: 127 (98%), Referenced to phase 2:NWTL and 6:SET, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 19.9	Intersection LOS: B
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 310: Donald Lee Hollowell Pkwy & I-285 SB off-ramp



Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (vph)	0	0	443	477	0	0	352	133	451	0	206
Future Volume (vph)	0	0	443	477	0	0	352	133	451	0	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300		0	0		0		0	0
Storage Lanes	0	0	1		0	0		0		2	1
Taper Length (ft)	25		25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00
Frt							0.959				0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1504	3167	0	0	3875	0	3127	0	1335
Flt Permitted			0.323						0.950		
Satd. Flow (perm)	0	0	511	3167	0	0	3875	0	3127	0	1335
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)							147				385
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	782			568			1114			887	
Travel Time (s)	17.8			12.9			25.3			20.2	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.90	0.83	0.83	0.83	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	20%	14%	2%	2%	24%	40%	12%	2%	21%
Adj. Flow (vph)	0	0	492	530	0	0	424	160	480	0	219
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	492	530	0	0	584	0	480	0	219
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			pm+pt	NA			NA		Prot		Perm
Protected Phases			5	2			6		3		

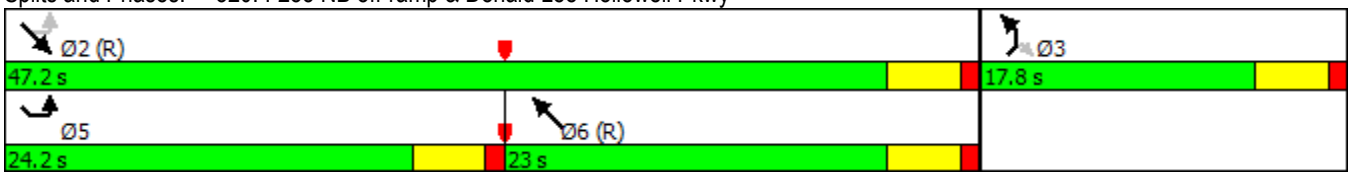
Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Permitted Phases			2								3
Detector Phase			5	2			6		3		3
Switch Phase											
Minimum Initial (s)			5.0	5.0			5.0		5.0		5.0
Minimum Split (s)			9.5	22.5			22.5		9.5		9.5
Total Split (s)			24.2	47.2			23.0		17.8		17.8
Total Split (%)			37.2%	72.6%			35.4%		27.4%		27.4%
Maximum Green (s)			19.7	42.7			18.5		13.3		13.3
Yellow Time (s)			3.5	3.5			3.5		3.5		3.5
All-Red Time (s)			1.0	1.0			1.0		1.0		1.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			4.5	4.5			4.5		4.5		4.5
Lead/Lag			Lead				Lag				
Lead-Lag Optimize?			Yes				Yes				
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			Min	C-Min			C-Min		None		None
Walk Time (s)				7.0			7.0				
Flash Dont Walk (s)				11.0			11.0				
Pedestrian Calls (#/hr)				0			0				
Act Effct Green (s)			42.2	42.2			20.9		13.8		13.8
Actuated g/C Ratio			0.65	0.65			0.32		0.21		0.21
v/c Ratio			0.84	0.26			0.43		0.73		0.37
Control Delay			22.4	4.9			14.9		31.4		1.8
Queue Delay			0.0	0.0			0.0		0.0		0.0
Total Delay			22.4	4.9			14.9		31.4		1.8
LOS			C	A			B		C		A
Approach Delay				13.3			14.9			22.1	
Approach LOS				B			B			C	
90th %ile Green (s)			19.7	42.7			18.5		13.3		13.3
90th %ile Term Code			Max	Coord			Coord		Max		Max
70th %ile Green (s)			19.7	40.3			16.1		15.7		15.7
70th %ile Term Code			Max	Coord			Coord		Max		Max
50th %ile Green (s)			18.6	40.8			17.7		15.2		15.2
50th %ile Term Code			Gap	Coord			Coord		Gap		Gap
30th %ile Green (s)			14.9	42.5			23.1		13.5		13.5
30th %ile Term Code			Gap	Coord			Coord		Gap		Gap
10th %ile Green (s)			11.1	44.9			29.3		11.1		11.1
10th %ile Term Code			Gap	Coord			Coord		Gap		Gap
Queue Length 50th (ft)			184	47			51		89		0
Queue Length 95th (ft)			m264	75			71		#154		0
Internal Link Dist (ft)	702			488			1034			807	
Turn Bay Length (ft)			300								
Base Capacity (vph)			632	2101			1384		683		592
Starvation Cap Reductn			0	0			0		0		0
Spillback Cap Reductn			0	0			0		0		0
Storage Cap Reductn			0	0			0		0		0
Reduced v/c Ratio			0.78	0.25			0.42		0.70		0.37

Intersection Summary

Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 40 (62%), Referenced to phase 2:SETL and 6:NWT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 320: I-285 NB off-ramp & Donald Lee Hollowell Pkwy



Existing (2021) PM Synchro Analysis Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	165	332	92	89	465	18	96	301	90	93	621	535
Future Volume (vph)	165	332	92	89	465	18	96	301	90	93	621	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	400		400	300		300
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.994				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1810	1482	1752	1761	0	1805	3438	1568	1327	2983	1468
Flt Permitted	0.142			0.433			0.274			0.476		
Satd. Flow (perm)	262	1810	1482	799	1761	0	521	3438	1568	665	2983	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		2				127			319
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			851			3037			3592	
Travel Time (s)		18.4			19.3			69.0			81.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	5%	9%	3%	7%	13%	0%	5%	3%	36%	21%	10%
Adj. Flow (vph)	179	361	100	97	505	20	104	327	98	101	675	582
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	361	100	97	525	0	104	327	98	101	675	582
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

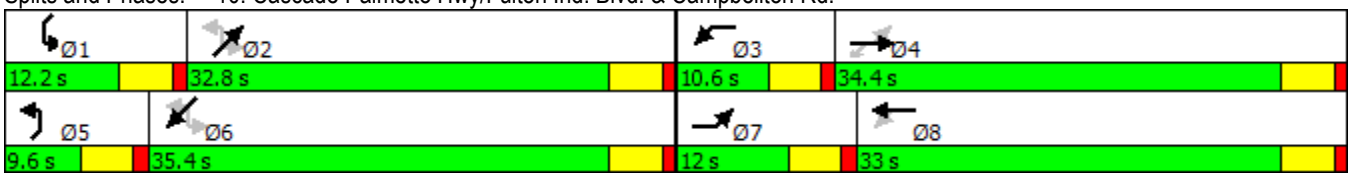
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	12.0	34.4	34.4	10.6	33.0		9.6	32.8	32.8	12.2	35.4	35.4
Total Split (%)	13.3%	38.2%	38.2%	11.8%	36.7%		10.7%	36.4%	36.4%	13.6%	39.3%	39.3%
Maximum Green (s)	7.5	29.9	29.9	6.1	28.5		5.1	28.3	28.3	7.7	30.9	30.9
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	37.1	31.5	31.5	33.3	27.1		29.0	25.2	25.2	32.9	27.1	27.1
Actuated g/C Ratio	0.45	0.38	0.38	0.40	0.33		0.35	0.30	0.30	0.40	0.33	0.33
v/c Ratio	0.70	0.53	0.16	0.25	0.91		0.40	0.31	0.17	0.31	0.69	0.84
Control Delay	32.6	26.7	3.1	16.2	50.9		19.9	24.0	3.2	17.8	29.0	24.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.6	26.7	3.1	16.2	50.9		19.9	24.0	3.2	17.8	29.0	24.3
LOS	C	C	A	B	D		B	C	A	B	C	C
Approach Delay		24.7			45.5			19.3			26.2	
Approach LOS		C			D			B			C	
90th %ile Green (s)	7.5	29.9	29.9	6.1	28.5		5.1	28.3	28.3	7.7	30.9	30.9
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	7.5	29.9	29.9	6.1	28.5		5.1	28.3	28.3	7.7	30.9	30.9
70th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	7.5	29.9	29.9	6.1	28.5		5.1	28.3	28.3	7.7	30.9	30.9
50th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
30th %ile Green (s)	7.5	29.9	29.9	6.1	28.5		5.1	24.0	24.0	7.7	26.6	26.6
30th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Gap	Gap
10th %ile Green (s)	7.5	32.8	32.8	0.0	20.8		0.0	17.5	17.5	0.0	17.5	17.5
10th %ile Term Code	Max	Hold	Hold	Skip	Gap		Skip	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	60	169	0	31	287		33	73	0	33	169	139
Queue Length 95th (ft)	#150	262	22	60	#490		64	109	22	65	231	#340
Internal Link Dist (ft)		728			771			2957			3512	
Turn Bay Length (ft)	300		300	300			400		400	300		300
Base Capacity (vph)	255	687	641	393	622		263	1204	631	326	1140	758
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.53	0.16	0.25	0.84		0.40	0.27	0.16	0.31	0.59	0.77

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 83	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 28.5	Intersection LOS: C
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 90	
50th %ile Actuated Cycle: 90	
30th %ile Actuated Cycle: 85.7	
10th %ile Actuated Cycle: 59.3	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Cascade Palmetto Hwy/Fulton Ind. Blvd. & Campbellton Rd.



Intersection	
Int Delay, s/veh	45.9

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	79	70	16	487	16	1246	39
Future Vol, veh/h	79	70	16	487	16	1246	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Yield
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	68	68	92	92	74	74	74
Heavy Vehicles, %	10	17	13	13	6	3	28
Mvmt Flow	116	103	17	529	22	1684	53

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2026	842	1684	0	386	-	0
Stage 1	1727	-	-	-	-	-	-
Stage 2	299	-	-	-	-	-	-
Critical Hdwy	7	7.24	4.36	-	6.52	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.6	3.47	2.33	-	2.56	-	-
Pot Cap-1 Maneuver	~ 45	279	330	-	799	-	-
Stage 1	118	-	-	-	-	-	-
Stage 2	703	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 43	279	330	-	799	-	-
Mov Cap-2 Maneuver	~ 43	-	-	-	-	-	-
Stage 1	118	-	-	-	-	-	-
Stage 2	667	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s$	526.2	0.5	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	330	-	43	279	799	-	-
HCM Lane V/C Ratio	0.053	-	2.702	0.369	0.027	-	-
HCM Control Delay (s)	16.5	-	$ 970	25.3	9.6	-	-
HCM Lane LOS	C	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	12.6	1.6	0.1	-	-

Notes

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

Intersection	
Int Delay, s/veh	41.5

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	71	73	10	484	4	1369	76
Future Vol, veh/h	71	73	10	484	4	1369	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	None
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	58	58	85	85	93	93	93
Heavy Vehicles, %	28	10	10	16	25	5	50
Mvmt Flow	122	126	12	569	4	1472	82

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1789	736	1472	0	415	-	0
Stage 1	1481	-	-	-	-	-	-
Stage 2	308	-	-	-	-	-	-
Critical Hdwy	7.36	7.1	4.3	-	6.9	-	-
Critical Hdwy Stg 1	6.36	-	-	-	-	-	-
Critical Hdwy Stg 2	6.36	-	-	-	-	-	-
Follow-up Hdwy	3.78	3.4	2.3	-	2.75	-	-
Pot Cap-1 Maneuver	~ 54	344	416	-	690	-	-
Stage 1	137	-	-	-	-	-	-
Stage 2	647	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 52	344	416	-	690	-	-
Mov Cap-2 Maneuver	~ 52	-	-	-	-	-	-
Stage 1	137	-	-	-	-	-	-
Stage 2	628	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 398.6	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	416	-	52	344	690	-	-
HCM Lane V/C Ratio	0.028	-	2.354	0.366	0.006	-	-
HCM Control Delay (s)	13.9	-	$ 786.5	21.4	10.2	-	-
HCM Lane LOS	B	-	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	12.5	1.6	0	-	-

Notes

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

Intersection	
Int Delay, s/veh	72.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	50	44	131	58	14	54	19	590	70	60	1086	38
Future Vol, veh/h	50	44	131	58	14	54	19	590	70	60	1086	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	300	-	200	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	91	91	91	86	86	86	89	89	89
Heavy Vehicles, %	26	0	13	7	7	4	42	12	1	2	8	40
Mvmt Flow	64	56	168	64	15	59	22	686	81	67	1220	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1750	2085	610	1503	2085	343	1220	0	0	686	0	0
Stage 1	1355	1355	-	730	730	-	-	-	-	-	-	-
Stage 2	395	730	-	773	1355	-	-	-	-	-	-	-
Critical Hdwy	8.02	6.5	7.16	7.64	6.64	6.98	4.94	-	-	4.14	-	-
Critical Hdwy Stg 1	7.02	5.5	-	6.64	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.02	5.5	-	6.64	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.76	4	3.43	3.57	4.07	3.34	2.62	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 42	~ 54	411	80	49	647	389	-	-	904	-	-
Stage 1	127	220	-	369	414	-	-	-	-	-	-	-
Stage 2	541	431	-	347	207	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 25	~ 47	411	-	43	647	389	-	-	904	-	-
Mov Cap-2 Maneuver	~ 25	~ 47	-	-	43	-	-	-	-	-	-	-
Stage 1	120	204	-	348	391	-	-	-	-	-	-	-
Stage 2	445	407	-	137	192	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	$ 638.2		0.4	0.5
HCM LOS	F	-		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SELn2	SWL	SWT	SWR
Capacity (veh/h)	389	-	-	-	32	411	904	-	-
HCM Lane V/C Ratio	0.057	-	-	-	3.766	0.409	0.075	-	-
HCM Control Delay (s)	14.8	-	-		$ 1500.1	19.7	9.3	-	-
HCM Lane LOS	B	-	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	14.2	1.9	0.2	-	-

Notes

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

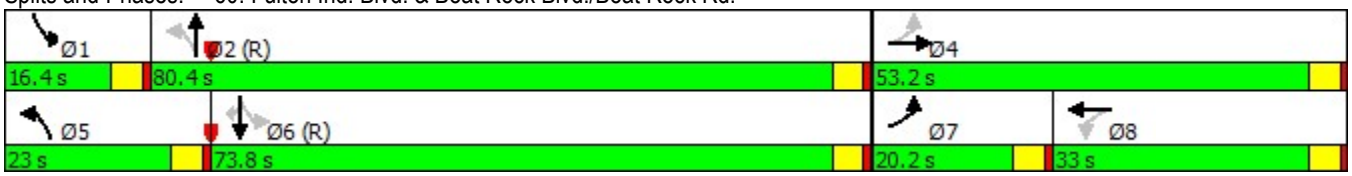
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	50	50	50	42	50	100	679	50	126	957	100
Future Volume (vph)	100	50	50	50	42	50	100	679	50	126	957	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		150
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.925			0.953			0.990				0.850
Flt Protected	0.950				0.983		0.950			0.950		
Satd. Flow (prot)	1128	1098	0	0	1483	0	1128	2978	0	1504	3008	897
Flt Permitted	0.456				0.844		0.188			0.289		
Satd. Flow (perm)	542	1098	0	0	1274	0	223	2978	0	458	3008	897
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			16			7				109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		812			1105			708			889	
Travel Time (s)		18.5			25.1			16.1			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	60%	60%	60%	20%	20%	20%	60%	20%	20%	20%	20%	80%
Adj. Flow (vph)	109	54	54	54	46	54	109	738	54	137	1040	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	108	0	0	154	0	109	792	0	137	1040	109
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	20.2	53.2		33.0	33.0		23.0	80.4		16.4	73.8	73.8
Total Split (%)	13.5%	35.5%		22.0%	22.0%		15.3%	53.6%		10.9%	49.2%	49.2%
Maximum Green (s)	15.7	48.7		28.5	28.5		18.5	75.9		11.9	69.3	69.3
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		Min	Min		None	C-Min		None	C-Min	C-Min
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0			0	0
Act Effct Green (s)	43.0	43.0			21.1		94.6	83.0		92.4	81.9	81.9
Actuated g/C Ratio	0.29	0.29			0.14		0.63	0.55		0.62	0.55	0.55
v/c Ratio	0.49	0.32			0.80		0.52	0.48		0.39	0.63	0.20
Control Delay	48.1	28.1			83.4		20.6	23.1		12.8	21.8	7.9
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	48.1	28.1			83.4		20.6	23.1		12.8	21.8	7.9
LOS	D	C			F		C	C		B	C	A
Approach Delay		38.2			83.4			22.8			19.7	
Approach LOS		D			F			C			B	
90th %ile Green (s)	15.7	48.7		28.5	28.5		16.8	75.9		11.9	71.0	71.0
90th %ile Term Code	Max	Hold		Max	Max		Gap	Coord		Max	Coord	Coord
70th %ile Green (s)	23.8	53.5		25.2	25.2		14.0	69.7		13.3	69.0	69.0
70th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Coord		Gap	Coord	Coord
50th %ile Green (s)	20.0	46.0		21.5	21.5		11.3	79.5		11.0	79.2	79.2
50th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Coord		Gap	Coord	Coord
30th %ile Green (s)	16.4	38.7		17.8	17.8		9.2	88.7		9.1	88.6	88.6
30th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Coord		Gap	Coord	Coord
10th %ile Green (s)	11.1	28.0		12.4	12.4		6.9	101.4		7.1	101.6	101.6
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Coord		Gap	Coord	Coord
Queue Length 50th (ft)	82	53			133		41	252		38	273	14
Queue Length 95th (ft)	136	106			207		74	327		102	331	50
Internal Link Dist (ft)		732			1025			628			809	
Turn Bay Length (ft)							300			300		150
Base Capacity (vph)	226	387			255		257	1676		372	1643	539
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.48	0.28			0.60		0.42	0.47		0.37	0.63	0.20

Intersection Summary

Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 126 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 26.2	Intersection LOS: C
Intersection Capacity Utilization 57.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 60: Fulton Ind. Blvd. & Boat Rock Blvd./Boat Rock Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1102	7	20	1118	31	4	0	30	32	0	7
Future Volume (vph)	9	1102	7	20	1118	31	4	0	30	32	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950				0.950		0.950		
Satd. Flow (prot)	1081	3223	1615	1289	3252	912	0	1444	1495	1347	1252	0
Flt Permitted	0.222			0.180				0.750		0.411		
Satd. Flow (perm)	253	3223	1615	244	3252	912	0	1140	1495	583	1252	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76			76			76		206	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		849			1099			609			533	
Travel Time (s)		19.3			25.0			13.8			12.1	
Peak Hour Factor	0.86	0.86	0.86	0.98	0.98	0.98	0.72	0.72	0.72	0.60	0.60	0.60
Heavy Vehicles (%)	67%	12%	0%	40%	11%	77%	25%	0%	8%	34%	0%	29%
Adj. Flow (vph)	10	1281	8	20	1141	32	6	0	42	53	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1281	8	20	1141	32	0	6	42	53	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	11.0	101.0	101.0	11.0	101.0	101.0	9.5	24.0	24.0	14.0	28.5	
Total Split (%)	7.3%	67.3%	67.3%	7.3%	67.3%	67.3%	6.3%	16.0%	16.0%	9.3%	19.0%	
Maximum Green (s)	6.5	96.5	96.5	6.5	96.5	96.5	5.0	19.5	19.5	9.5	24.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	119.9	117.2	117.2	121.1	119.4	119.4		6.5	6.5	20.4	20.2	
Actuated g/C Ratio	0.80	0.78	0.78	0.81	0.80	0.80		0.04	0.04	0.14	0.13	
v/c Ratio	0.04	0.51	0.01	0.08	0.44	0.04		0.12	0.31	0.39	0.03	
Control Delay	3.9	6.2	0.0	2.4	5.2	1.0		73.8	7.9	63.3	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	3.9	6.2	0.0	2.4	5.2	1.0		73.8	7.9	63.3	0.1	
LOS	A	A	A	A	A	A		E	A	E	A	
Approach Delay		6.2			5.1			16.2			51.7	
Approach LOS		A			A			B			D	
90th %ile Green (s)	6.5	100.3	100.3	6.9	100.7	100.7	0.0	8.2	8.2	16.6	29.3	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Skip	Gap	Gap	Gap	Hold	
70th %ile Green (s)	6.0	105.2	105.2	6.3	105.5	105.5	0.0	7.0	7.0	13.5	25.0	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Skip	Gap	Gap	Gap	Hold	
50th %ile Green (s)	0.0	108.5	108.5	5.9	118.9	118.9	0.0	6.2	6.2	11.4	22.1	
50th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Skip	Gap	Gap	Gap	Hold	
30th %ile Green (s)	0.0	121.8	121.8	0.0	121.8	121.8	0.0	5.5	5.5	9.2	19.2	
30th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Gap	Gap	Gap	Hold	
10th %ile Green (s)	0.0	145.5	145.5	0.0	145.5	145.5	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	2	170	0	1	40	0		6	0	47	0	
Queue Length 95th (ft)	m4	215	m0	m5	347	m3		18	0	56	0	
Internal Link Dist (ft)		769			1019			529			453	
Turn Bay Length (ft)	300		300	300		300						
Base Capacity (vph)	238	2517	1278	242	2588	741		148	260	143	382	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.04	0.51	0.01	0.08	0.44	0.04		0.04	0.16	0.37	0.03	

Intersection Summary

Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 15 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 7.0	Intersection LOS: A
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 70: Lakeview Ct. & Fulton Ind. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	883	100	245	769	230	300	610	100	101	300	185
Future Volume (vph)	213	883	100	245	769	230	300	610	100	101	300	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	350		300	350		300	300		300
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153			218			153			228
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1099			761			631			649	
Travel Time (s)		25.0			17.3			14.3			14.8	
Peak Hour Factor	0.79	0.93	0.92	0.81	0.91	0.92	0.91	0.91	0.91	0.81	0.81	0.81
Adj. Flow (vph)	270	949	109	302	845	250	330	670	110	125	370	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	270	949	109	302	845	250	330	670	110	125	370	228
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	12.0	24.9	24.9	13.6	26.5	26.5	14.0	27.0	27.0	9.5	22.5	22.5
Total Split (%)	16.0%	33.2%	33.2%	18.1%	35.3%	35.3%	18.7%	36.0%	36.0%	12.7%	30.0%	30.0%
Maximum Green (s)	7.5	20.4	20.4	9.1	22.0	22.0	9.5	22.5	22.5	5.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.4	22.6	22.6	9.5	23.7	23.7	9.5	21.8	21.8	5.2	15.4	15.4
Actuated g/C Ratio	0.11	0.30	0.30	0.13	0.32	0.32	0.13	0.29	0.29	0.07	0.21	0.21
v/c Ratio	0.70	0.62	0.19	0.69	0.76	0.39	0.76	0.65	0.19	0.53	0.51	0.45
Control Delay	48.2	24.6	5.3	37.7	23.2	5.5	44.9	26.8	2.5	42.4	28.4	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.2	24.6	5.3	37.7	23.2	5.5	44.9	26.8	2.5	42.4	28.4	6.8
LOS	D	C	A	D	C	A	D	C	A	D	C	A
Approach Delay		27.9			23.2			29.8			24.0	
Approach LOS		C			C			C			C	
90th %ile Green (s)	7.5	20.4	20.4	9.1	22.0	22.0	9.5	22.5	22.5	5.0	18.0	18.0
90th %ile Term Code	Max	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	7.5	20.4	20.4	9.1	22.0	22.0	9.5	22.5	22.5	5.0	18.0	18.0
70th %ile Term Code	Max	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Max	Hold	Hold
50th %ile Green (s)	8.4	20.4	20.4	10.0	22.0	22.0	9.5	21.6	21.6	5.0	17.1	17.1
50th %ile Term Code	Max	Coord	Coord	Max	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	10.3	22.3	22.3	10.7	22.7	22.7	9.5	19.0	19.0	5.0	14.5	14.5
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
10th %ile Green (s)	8.5	29.4	29.4	8.8	29.7	29.7	9.3	23.3	23.3	0.0	9.5	9.5
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	84	164	8	87	204	24	77	143	0	29	78	0
Queue Length 95th (ft)	125	245	43	m87	m189	m25	#135	195	18	49	102	36
Internal Link Dist (ft)		1019			681			551			569	
Turn Bay Length (ft)	300		300	350		300	350		300	300		300
Base Capacity (vph)	386	1531	583	439	1117	649	434	1069	585	237	849	553
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.62	0.19	0.69	0.76	0.39	0.76	0.63	0.19	0.53	0.44	0.41

Intersection Summary

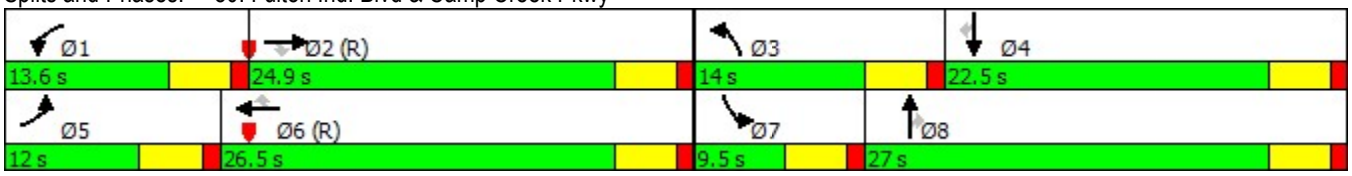
Area Type: Other

Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 26.3	Intersection LOS: C
Intersection Capacity Utilization 63.4%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 80: Fulton Ind. Blvd & Camp Creek Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Future Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		300	300		300
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1900	1568	1736	1429	1538	1641	3252	1442	1671	3252	1380
Flt Permitted	0.751			0.714			0.050			0.145		
Satd. Flow (perm)	1399	1900	1568	1304	1429	1538	86	3252	1442	255	3252	1380
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109			110			76
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		458			669			1465			1699	
Travel Time (s)		10.4			15.2			33.3			38.6	
Peak Hour Factor	0.67	0.67	0.67	0.97	0.97	0.97	0.95	0.95	0.95	0.82	0.82	0.82
Heavy Vehicles (%)	2%	0%	3%	4%	33%	5%	10%	11%	12%	8%	11%	17%
Adj. Flow (vph)	75	33	488	222	10	72	104	1141	121	139	1874	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	75	33	488	222	10	72	104	1141	121	139	1874	10
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.2	40.1	40.1	10.2	40.1	40.1	10.8	82.1	82.1	17.6	88.9	88.9
Total Split (%)	6.8%	26.7%	26.7%	6.8%	26.7%	26.7%	7.2%	54.7%	54.7%	11.7%	59.3%	59.3%
Maximum Green (s)	5.7	35.6	35.6	5.7	35.6	35.6	6.3	77.6	77.6	13.1	84.4	84.4
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	41.3	35.6	35.6	42.2	37.6	37.6	86.6	80.3	80.3	94.2	84.4	84.4
Actuated g/C Ratio	0.28	0.24	0.24	0.28	0.25	0.25	0.58	0.54	0.54	0.63	0.56	0.56
v/c Ratio	0.19	0.07	1.07	0.58	0.03	0.15	0.91	0.66	0.15	0.54	1.02	0.01
Control Delay	39.8	45.1	104.1	51.9	44.4	2.7	90.3	20.3	5.0	18.9	60.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	45.1	104.1	51.9	44.4	2.7	90.3	20.3	5.0	18.9	60.0	0.0
LOS	D	D	F	D	D	A	F	C	A	B	E	A
Approach Delay		92.7			40.0			24.3			56.9	
Approach LOS		F			D			C			E	
90th %ile Green (s)	5.7	35.6	35.6	5.7	35.6	35.6	6.3	77.6	77.6	13.1	84.4	84.4
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	5.7	35.6	35.6	5.7	35.6	35.6	6.3	79.1	79.1	11.6	84.4	84.4
70th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	5.7	35.6	35.6	5.7	35.6	35.6	6.3	80.3	80.3	10.4	84.4	84.4
50th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	5.7	35.6	35.6	5.7	35.6	35.6	6.3	81.4	81.4	9.3	84.4	84.4
30th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	0.0	35.6	35.6	5.7	45.8	45.8	6.3	83.0	83.0	7.7	84.4	84.4
10th %ile Term Code	Skip	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
Queue Length 50th (ft)	53	25	~442	174	8	0	58	332	30	51	~1024	0
Queue Length 95th (ft)	70	41	348	255	25	13	#174	347	47	74	903	0
Internal Link Dist (ft)		378			589			1385			1619	
Turn Bay Length (ft)							300		300	300		300
Base Capacity (vph)	399	450	455	383	358	467	114	1740	823	285	1829	809
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	1.07	0.58	0.03	0.15	0.91	0.66	0.15	0.49	1.02	0.01

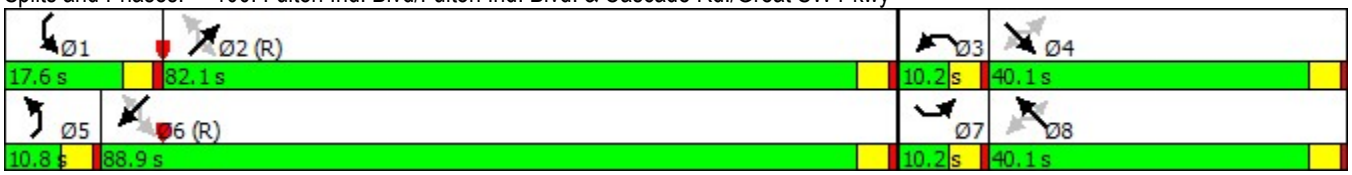
Intersection Summary

Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 77 (51%), Referenced to phase 2:NETL and 6:SWTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 50.3	Intersection LOS: D
Intersection Capacity Utilization 85.9%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Fulton Ind. Blvd/Fulton Ind. Blvd. & Cascade Rd./Great SW Pkwy



Intersection	
Int Delay, s/veh	189.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	47	43	0	156	22	1191	17	67	1222	10
Future Vol, veh/h	31	0	47	43	0	156	22	1191	17	67	1222	10
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	46	46	46	82	82	82	97	97	97	84	84	84
Heavy Vehicles, %	0	0	9	5	0	10	33	9	53	30	11	20
Mvmt Flow	67	0	102	52	0	190	23	1228	18	80	1455	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2273	2887	727	2160	2887	614	1455	0	-	1228	0	0
Stage 1	1614	1614	-	1273	1273	-	-	-	-	-	-	-
Stage 2	659	1273	-	887	1614	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7.08	7.6	6.5	7.1	4.76	-	-	4.7	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.39	3.55	4	3.4	2.53	-	-	2.5	-	-
Pot Cap-1 Maneuver	~ 22	16	351	~ 26	16	416	332	-	0	431	-	-
Stage 1	111	164	-	173	241	-	-	-	0	-	-	-
Stage 2	424	241	-	299	164	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	~ 10	12	351	~ 15	12	416	332	-	-	431	-	-
Mov Cap-2 Maneuver	~ 10	12	-	~ 15	12	-	-	-	-	-	-	-
Stage 1	103	134	-	161	224	-	-	-	-	-	-	-
Stage 2	214	224	-	173	134	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 3049.1	$ 370.4	0.3	0.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	332	-	24	15	416	431	-	-
HCM Lane V/C Ratio	0.068	-	7.065	3.496	0.457	0.185	-	-
HCM Control Delay (s)	16.6	-	$ 3049.1	$ 1639	20.7	15.2	-	-
HCM Lane LOS	C	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0.2	-	21.2	7.4	2.3	0.7	-	-

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1278	0	100	1250	0	50	14	0	50	106	0
Future Volume (vph)	100	1278	0	100	1250	0	50	14	0	50	106	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		250	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt												
Flt Protected	0.950			0.950				0.962			0.984	
Satd. Flow (prot)	1770	3539	1863	1770	3539	1863	0	3405	0	0	3483	0
Flt Permitted	0.131			0.115				0.737			0.842	
Satd. Flow (perm)	244	3539	1863	214	3539	1863	0	2608	0	0	2980	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		642			731			251			574	
Travel Time (s)		14.6			16.6			5.7			13.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	1389	0	109	1359	0	54	15	0	54	115	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	1389	0	109	1359	0	0	69	0	0	169	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	9.5	42.1	42.1	10.4	43.0	43.0	22.5	22.5		22.5	22.5	
Total Split (%)	12.7%	56.1%	56.1%	13.9%	57.3%	57.3%	30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	5.0	37.6	37.6	5.9	38.5	38.5	18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	
Act Effct Green (s)	38.8	35.0		40.2	35.7			8.9			8.9	
Actuated g/C Ratio	0.64	0.57		0.66	0.59			0.15			0.15	
v/c Ratio	0.39	0.68		0.37	0.66			0.18			0.39	
Control Delay	7.9	12.3		7.8	11.3			25.6			27.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	7.9	12.3		7.8	11.3			25.6			27.7	
LOS	A	B		A	B			C			C	
Approach Delay		12.0			11.1			25.6			27.7	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	37.6	37.6	5.9	38.5	38.5	11.7	11.7		11.7	11.7	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Hold	Hold		Gap	Gap	
70th %ile Green (s)	5.0	37.6	37.6	5.9	38.5	38.5	10.1	10.1		10.1	10.1	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Hold	Hold		Gap	Gap	
50th %ile Green (s)	5.0	35.4	35.4	5.9	36.3	36.3	9.0	9.0		9.0	9.0	
50th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Hold	Hold		Gap	Gap	
30th %ile Green (s)	5.0	29.8	29.8	5.9	30.7	30.7	7.9	7.9		7.9	7.9	
30th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	33.1	33.1	0.0	33.1	33.1	6.4	6.4		6.4	6.4	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	10	187		10	173			12			32	
Queue Length 95th (ft)	24	283		28	264			30			60	
Internal Link Dist (ft)		562			651			171			494	
Turn Bay Length (ft)	300			300								
Base Capacity (vph)	282	2215		293	2269			781			893	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.39	0.63		0.37	0.60			0.09			0.19	

Intersection Summary

Area Type: Other

Cycle Length: 75	
Actuated Cycle Length: 61	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 12.7	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 68.7	
70th %ile Actuated Cycle: 67.1	
50th %ile Actuated Cycle: 63.8	
30th %ile Actuated Cycle: 57.1	
10th %ile Actuated Cycle: 48.5	

Splits and Phases: 130: Great SW Pkwy

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	99	41	1574	125	15	1069
Future Volume (vph)	99	41	1574	125	15	1069
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	300	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.960			0.850		
Flt Protected	0.966				0.950	
Satd. Flow (prot)	1592	0	3343	1553	1327	3139
Flt Permitted	0.966				0.081	
Satd. Flow (perm)	1592	0	3343	1553	113	3139
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	24			132		
Link Speed (mph)	30		30			30
Link Distance (ft)	676		615			670
Travel Time (s)	15.4		14.0			15.2
Peak Hour Factor	0.70	0.70	0.95	0.95	0.90	0.90
Heavy Vehicles (%)	8%	17%	8%	4%	36%	15%
Adj. Flow (vph)	141	59	1657	132	17	1188
Shared Lane Traffic (%)						
Lane Group Flow (vph)	200	0	1657	132	17	1188
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Permitted Phases				2	6	
Detector Phase	8		2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5
Total Split (s)	22.5		48.0	48.0	9.5	57.5
Total Split (%)	28.1%		60.0%	60.0%	11.9%	71.9%
Maximum Green (s)	18.0		43.5	43.5	5.0	53.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	None	Min
Walk Time (s)	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0		0	0		0
Act Effct Green (s)	12.6		45.1	45.1	46.7	46.7
Actuated g/C Ratio	0.18		0.66	0.66	0.68	0.68
v/c Ratio	0.64		0.75	0.12	0.10	0.55
Control Delay	32.7		12.8	1.9	5.6	7.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	32.7		12.8	1.9	5.6	7.2
LOS	C		B	A	A	A
Approach Delay	32.7		12.0			7.2
Approach LOS	C		B			A
90th %ile Green (s)	18.0		43.5	43.5	5.0	53.0
90th %ile Term Code	Max		Max	Max	Max	Hold
70th %ile Green (s)	14.7		43.5	43.5	0.0	43.5
70th %ile Term Code	Gap		Max	Max	Skip	Hold
50th %ile Green (s)	12.6		45.2	45.2	0.0	45.2
50th %ile Term Code	Gap		Dwell	Dwell	Skip	Dwell
30th %ile Green (s)	10.8		47.1	47.1	0.0	47.1
30th %ile Term Code	Gap		Dwell	Dwell	Skip	Dwell
10th %ile Green (s)	7.9		44.1	44.1	0.0	44.1
10th %ile Term Code	Gap		Dwell	Dwell	Skip	Dwell
Queue Length 50th (ft)	66		187	0	2	109
Queue Length 95th (ft)	103		#548	23	9	197
Internal Link Dist (ft)	596		535			590
Turn Bay Length (ft)				300	300	
Base Capacity (vph)	439		2202	1068	166	2451
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.46		0.75	0.12	0.10	0.48

Intersection Summary

Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 68.4	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 11.5	Intersection LOS: B
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 80	
70th %ile Actuated Cycle: 67.2	
50th %ile Actuated Cycle: 66.8	
30th %ile Actuated Cycle: 66.9	
10th %ile Actuated Cycle: 61	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 140: Bakers Ferry Rd.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	134	14	38	28	8	55	22	1592	13	57	998	50
Future Volume (vph)	134	14	38	28	8	55	22	1592	13	57	998	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.890			0.918			0.999			0.993	
Flt Protected	0.950				0.985		0.950			0.950		
Satd. Flow (prot)	1626	1446	0	0	1519	0	1357	4840	0	1687	4477	0
Flt Permitted	0.751				0.895		0.950			0.950		
Satd. Flow (perm)	1285	1446	0	0	1381	0	1357	4840	0	1687	4477	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		63			69			2			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		409			537			753			584	
Travel Time (s)		9.3			12.2			17.1			13.3	
Peak Hour Factor	0.60	0.60	0.60	0.80	0.80	0.80	0.96	0.96	0.96	0.94	0.94	0.94
Heavy Vehicles (%)	11%	14%	18%	14%	38%	9%	33%	7%	15%	7%	15%	16%
Adj. Flow (vph)	223	23	63	35	10	69	23	1658	14	61	1062	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	223	86	0	0	114	0	23	1672	0	61	1115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	

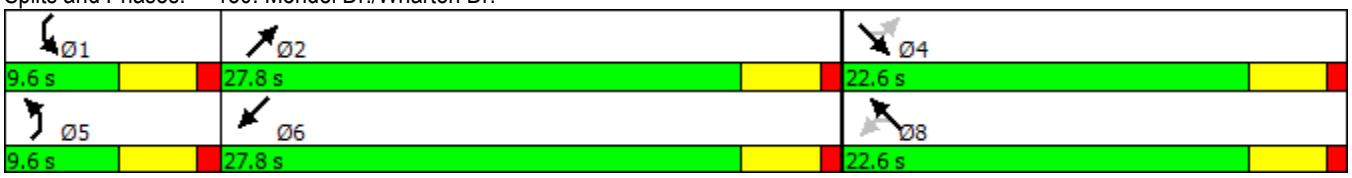
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		9.6	27.8		9.6	27.8	
Total Split (%)	37.7%	37.7%		37.7%	37.7%		16.0%	46.3%		16.0%	46.3%	
Maximum Green (s)	18.1	18.1		18.1	18.1		5.1	23.3		5.1	23.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	13.9	13.9			13.9		5.2	26.3		5.2	29.9	
Actuated g/C Ratio	0.25	0.25			0.25		0.10	0.48		0.10	0.55	
v/c Ratio	0.68	0.21			0.28		0.18	0.72		0.38	0.45	
Control Delay	29.9	8.4			10.0		28.9	16.2		32.6	9.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	29.9	8.4			10.0		28.9	16.2		32.6	9.5	
LOS	C	A			B		C	B		C	A	
Approach Delay		23.9			10.0			16.4			10.7	
Approach LOS		C			B			B			B	
90th %ile Green (s)	18.1	18.1		18.1	18.1		5.1	23.3		5.1	23.3	
90th %ile Term Code	Max	Max		Hold	Hold		Max	Max		Max	Max	
70th %ile Green (s)	18.1	18.1		18.1	18.1		0.0	23.3		5.1	32.9	
70th %ile Term Code	Max	Max		Hold	Hold		Skip	Max		Max	Hold	
50th %ile Green (s)	14.8	14.8		14.8	14.8		0.0	23.3		5.1	32.9	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Max	Hold	
30th %ile Green (s)	10.5	10.5		10.5	10.5		0.0	23.3		0.0	23.3	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Hold	
10th %ile Green (s)	8.6	8.6		8.6	8.6		0.0	36.3		0.0	36.3	
10th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	67	6			12		7	178		20	66	
Queue Length 95th (ft)	77	15			36		27	#295		#55	154	
Internal Link Dist (ft)		329			457			673			504	
Turn Bay Length (ft)							300			300		
Base Capacity (vph)	432	528			509		128	2329		159	2455	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.52	0.16			0.22		0.18	0.72		0.38	0.45	

Intersection Summary

Area Type: Other	
Cycle Length: 60	
Actuated Cycle Length: 54.7	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 14.9	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 60	
70th %ile Actuated Cycle: 60	
50th %ile Actuated Cycle: 56.7	
30th %ile Actuated Cycle: 42.8	
10th %ile Actuated Cycle: 53.9	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 150: Mendel Dr./Wharton Dr.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	41	0	9	3	0	5	17	1818	7	3	1084	21
Future Volume (vph)	41	0	9	3	0	5	17	1818	7	3	1084	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	250		250	200		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.976			0.913				0.850		0.997	
Flt Protected		0.961			0.982		0.950			0.950		
Satd. Flow (prot)	0	1411	0	0	905	0	1444	4803	868	902	4422	0
Flt Permitted					0.878		0.950			0.950		
Satd. Flow (perm)	0	1468	0	0	809	0	1444	4803	868	902	4422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		101			101				101		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		720			447			1232			950	
Travel Time (s)		16.4			10.2			28.0			21.6	
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles (%)	29%	0%	14%	67%	0%	100%	25%	8%	86%	100%	17%	14%
Adj. Flow (vph)	55	0	12	5	0	9	18	1894	7	4	1275	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	14	0	18	1894	7	4	1300	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8					2			
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	33.0	33.0	9.5	33.0	
Total Split (%)	34.6%	34.6%		34.6%	34.6%		14.6%	50.8%	50.8%	14.6%	50.8%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.0	28.5	28.5	5.0	28.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	Min	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)		6.0			6.0		5.1	28.3	28.3	5.1	38.4	
Actuated g/C Ratio		0.12			0.12		0.11	0.58	0.58	0.11	0.79	
v/c Ratio		0.25			0.07		0.12	0.67	0.01	0.04	0.37	
Control Delay		5.4			0.8		24.4	9.5	0.0	23.3	4.2	
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		5.4			0.8		24.4	9.5	0.0	23.3	4.2	
LOS		A			A		C	A	A	C	A	
Approach Delay		5.4			0.8			9.6			4.2	
Approach LOS		A			A			A			A	
90th %ile Green (s)	7.6	7.6		7.6	7.6		5.0	28.5	28.5	5.0	28.5	
90th %ile Term Code	Gap	Gap		Hold	Hold		Max	Max	Max	Max	Max	
70th %ile Green (s)	5.5	5.5		5.5	5.5		0.0	28.5	28.5	5.0	38.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max	Max	Max	Hold	
50th %ile Green (s)	5.5	5.5		5.5	5.5		0.0	28.5	28.5	5.0	38.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max	Max	Max	Hold	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	28.5	28.5	5.0	38.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max	Max	Max	Hold	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	25.9	25.9	5.0	35.4	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Gap	Gap	Max	Hold	
Queue Length 50th (ft)		0			0		5	143	0	1	39	
Queue Length 95th (ft)		8			0		22	212	0	8	117	
Internal Link Dist (ft)		640			367			1152			870	
Turn Bay Length (ft)							250		250	200		
Base Capacity (vph)		617			368		151	2874	560	94	3512	
Starvation Cap Reductn		0			0		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.11			0.04		0.12	0.66	0.01	0.04	0.37	

Intersection Summary

Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 48.4	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 48.2%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 54.6	
70th %ile Actuated Cycle: 52.5	
50th %ile Actuated Cycle: 52.5	
30th %ile Actuated Cycle: 42.5	
10th %ile Actuated Cycle: 39.9	

Splits and Phases: 160: Marvin Miller Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	30	0	0	250	219	64	1800	0	35	1108	0
Future Volume (vph)	30	30	0	0	250	219	64	1800	0	35	1108	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt					0.937							
Flt Protected		0.976					0.950			0.950		
Satd. Flow (prot)	0	1545	0	0	1484	0	1504	4322	0	1504	4322	1583
Flt Permitted		0.497					0.950			0.950		
Satd. Flow (perm)	0	787	0	0	1484	0	1504	4322	0	1504	4322	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					52							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.96	0.96	0.96	0.73	0.73	0.73
Heavy Vehicles (%)	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Adj. Flow (vph)	38	38	0	0	278	243	67	1875	0	48	1518	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	76	0	0	521	0	67	1875	0	48	1518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA			NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8								6
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	34.5	34.5		34.5	34.5		11.8	45.9		9.6	43.7	43.7
Total Split (%)	38.3%	38.3%		38.3%	38.3%		13.1%	51.0%		10.7%	48.6%	48.6%
Maximum Green (s)	30.0	30.0		30.0	30.0		7.3	41.4		5.1	39.2	39.2
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		30.1			30.1		7.0	41.5		5.1	39.8	
Actuated g/C Ratio		0.34			0.34		0.08	0.47		0.06	0.45	
v/c Ratio		0.28			0.96		0.57	0.92		0.55	0.78	
Control Delay		25.9			59.1		59.5	31.4		66.1	24.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		25.9			59.1		59.5	31.4		66.1	24.5	
LOS		C			E		E	C		E	C	
Approach Delay		25.9			59.1			32.4			25.8	
Approach LOS		C			E			C			C	
90th %ile Green (s)	30.0	30.0		30.0	30.0		7.3	41.4		5.1	39.2	39.2
90th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
70th %ile Green (s)	30.0	30.0		30.0	30.0		7.3	41.4		5.1	39.2	39.2
70th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
50th %ile Green (s)	30.0	30.0		30.0	30.0		7.3	41.4		5.1	39.2	39.2
50th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
30th %ile Green (s)	30.0	30.0		30.0	30.0		7.3	41.4		5.1	39.2	39.2
30th %ile Term Code	Hold	Hold		Max	Max		Max	Max		Max	Max	Max
10th %ile Green (s)	30.0	30.0		30.0	30.0		0.0	41.4		0.0	41.4	41.4
10th %ile Term Code	Hold	Hold		Max	Max		Skip	Max		Skip	Hold	Hold
Queue Length 50th (ft)		32			268		37	359		27	267	
Queue Length 95th (ft)		59			#481		#91	#480		#54	236	
Internal Link Dist (ft)		669			848			870			895	
Turn Bay Length (ft)							200			300		
Base Capacity (vph)		268			540		124	2035		87	1951	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.28			0.96		0.54	0.92		0.55	0.78	

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 88.1	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 33.2	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 90	
50th %ile Actuated Cycle: 90	
30th %ile Actuated Cycle: 90	
10th %ile Actuated Cycle: 80.4	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 170: Patton Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	27	2031	5	91	1120	14	76	4	20	15	5	82
Future Volume (vph)	27	2031	5	91	1120	14	76	4	20	15	5	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.973			0.891	
Flt Protected	0.950			0.950				0.964			0.993	
Satd. Flow (prot)	1805	4802	0	1770	5534	0	0	1726	0	0	1650	0
Flt Permitted	0.950			0.950				0.522			0.952	
Satd. Flow (perm)	1805	4802	0	1770	5534	0	0	934	0	0	1581	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			4			11			121	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			245			480			470	
Travel Time (s)		17.3			5.6			10.9			10.7	
Peak Hour Factor	0.96	0.96	0.96	0.84	0.84	0.84	0.85	0.85	0.85	0.68	0.68	0.68
Heavy Vehicles (%)	0%	8%	20%	2%	18%	7%	3%	0%	5%	13%	0%	0%
Adj. Flow (vph)	28	2116	5	108	1333	17	89	5	24	22	7	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	2121	0	108	1350	0	0	118	0	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Permitted Phases							4			8		
Detector Phase	5	2		1	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	10.3	60.0		16.0	65.7		24.0	24.0		24.0	24.0	
Total Split (%)	10.3%	60.0%		16.0%	65.7%		24.0%	24.0%		24.0%	24.0%	
Maximum Green (s)	5.8	55.5		11.5	61.2		19.5	19.5		19.5	19.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.2	61.4		10.4	69.7			14.8			14.8	
Actuated g/C Ratio	0.06	0.61		0.10	0.70			0.15			0.15	
v/c Ratio	0.25	0.72		0.59	0.35			0.80			0.45	
Control Delay	50.5	16.3		54.1	7.1			72.8			14.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	50.5	16.3		54.1	7.1			72.8			14.6	
LOS	D	B		D	A			E			B	
Approach Delay		16.7			10.5			72.8			14.6	
Approach LOS		B			B			E			B	
90th %ile Green (s)	5.8	55.5		11.5	61.2		19.5	19.5		19.5	19.5	
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Hold	Hold	
70th %ile Green (s)	6.6	55.5		12.3	61.2		18.7	18.7		18.7	18.7	
70th %ile Term Code	Max	Coord		Max	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	7.0	59.5		11.4	63.9		15.6	15.6		15.6	15.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	64.5		9.6	78.6		12.4	12.4		12.4	12.4	
30th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	71.9		7.0	83.4		7.6	7.6		7.6	7.6	
10th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	17	333		73	85			66			16	
Queue Length 95th (ft)	46	439		122	89			#117			34	
Internal Link Dist (ft)		680			165			400			390	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	112	2947		206	3856			190			405	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.25	0.72		0.52	0.35			0.62			0.37	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 71 (71%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 180: Commerce Cir.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2225	1185	65	0	40
Future Volume (vph)	0	2225	1185	65	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	0.86	0.86	1.00	1.00
Frt			0.987			0.865
Flt Protected						
Satd. Flow (prot)	0	6052	5564	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	6052	5564	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		245	541		662	
Travel Time (s)		5.6	12.3		15.0	
Peak Hour Factor	0.97	0.97	0.84	0.48	0.88	0.88
Heavy Vehicles (%)	8%	8%	17%	5%	2%	2%
Adj. Flow (vph)	0	2294	1411	135	0	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2294	1546	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2223	14	73	1249	7	15	0	125	9	0	1
Future Volume (vph)	10	2223	14	73	1249	7	15	0	125	9	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.86	0.86	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.999			0.880			0.984	
Flt Protected	0.950			0.950				0.995			0.958	
Satd. Flow (prot)	1805	6044	0	1388	5633	0	0	1571	0	0	1629	0
Flt Permitted	0.950			0.950				0.959			0.454	
Satd. Flow (perm)	1805	6044	0	1388	5633	0	0	1514	0	0	772	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2			154			115	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		541			537			437			323	
Travel Time (s)		12.3			12.2			9.9			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.81	0.81	0.81	0.61	0.61	0.61
Heavy Vehicles (%)	0%	8%	14%	30%	16%	0%	13%	0%	5%	11%	2%	2%
Adj. Flow (vph)	11	2416	15	86	1469	8	19	0	154	15	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	2431	0	86	1477	0	0	173	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	10.0	58.6		18.2	66.8		23.2	23.2		23.2	23.2	
Total Split (%)	10.0%	58.6%		18.2%	66.8%		23.2%	23.2%		23.2%	23.2%	
Maximum Green (s)	5.5	54.1		13.7	62.3		18.7	18.7		18.7	18.7	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	C-Max		Min	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.2	66.8		11.5	72.0			8.3			8.3	
Actuated g/C Ratio	0.06	0.67		0.12	0.72			0.08			0.08	
v/c Ratio	0.10	0.60		0.54	0.36			0.65			0.10	
Control Delay	52.0	3.2		66.0	1.9			21.3			1.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	52.0	3.2		66.0	1.9			21.3			1.2	
LOS	D	A		E	A			C			A	
Approach Delay		3.4			5.4			21.3			1.2	
Approach LOS		A			A			C			A	
90th %ile Green (s)	7.4	56.2		16.4	65.2		13.9	13.9		13.9	13.9	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	6.6	63.3		13.5	70.2		9.7	9.7		9.7	9.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	6.0	68.2		11.5	73.7		6.8	6.8		6.8	6.8	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	5.5	71.6		9.4	75.5		5.5	5.5		5.5	5.5	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	5.5	74.5		6.5	75.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	7	36		57	25			12			0	
Queue Length 95th (ft)	m11	51		m81	44			54			0	
Internal Link Dist (ft)		461			457			357			243	
Turn Bay Length (ft)	300			150								
Base Capacity (vph)	112	4035		197	4057			408			237	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.10	0.60		0.44	0.36			0.42			0.07	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 90 (90%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 4.9	Intersection LOS: A
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: Shirley Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	251	0	174	0	0	0	0	1057	1178	409	1320	0
Future Volume (vph)	251	0	174	0	0	0	0	1057	1178	409	1320	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	225		0	0		0
Storage Lanes	2		1	0		0	0		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.88	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	3183	0	1346	0	0	0	0	6052	2608	1736	4510	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3183	0	1346	0	0	0	0	6052	2608	1736	4510	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			88						806			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		758			734			537			524	
Travel Time (s)		17.2			16.7			12.2			11.9	
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	0.91	0.91	0.91
Heavy Vehicles (%)	10%	0%	20%	2%	2%	2%	0%	8%	9%	4%	15%	0%
Adj. Flow (vph)	299	0	207	0	0	0	0	1258	1402	449	1451	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	299	0	207	0	0	0	0	1258	1402	449	1451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1		1					2	1	1	2	
Detector Template	Left		Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20		20					100	20	20	100	
Trailing Detector (ft)	0		0					0	0	0	0	
Detector 1 Position(ft)	0		0					0	0	0	0	
Detector 1 Size(ft)	20		20					6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot		Perm					NA	Perm	Prot	NA	
Protected Phases	7							2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases			7						2			
Detector Phase	7		7					2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5		9.5					22.5	22.5	9.5	22.5	
Total Split (s)	19.0		19.0					47.0	47.0	34.0	81.0	
Total Split (%)	19.0%		19.0%					47.0%	47.0%	34.0%	81.0%	
Maximum Green (s)	14.5		14.5					42.5	42.5	29.5	76.5	
Yellow Time (s)	3.5		3.5					3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5					4.5	4.5	4.5	4.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Recall Mode	None		None					C-Min	C-Min	None	C-Min	
Walk Time (s)								7.0	7.0		7.0	
Flash Dont Walk (s)								11.0	11.0		11.0	
Pedestrian Calls (#/hr)								0	0		0	
Act Effct Green (s)	13.4		13.4					44.9	44.9	28.2	77.6	
Actuated g/C Ratio	0.13		0.13					0.45	0.45	0.28	0.78	
v/c Ratio	0.70		0.81					0.46	0.87	0.92	0.41	
Control Delay	50.8		48.1					11.1	11.4	48.8	2.6	
Queue Delay	0.0		0.0					0.0	7.6	0.0	0.2	
Total Delay	50.8		48.1					11.1	19.0	48.8	2.8	
LOS	D		D					B	B	D	A	
Approach Delay		49.7						15.3			13.7	
Approach LOS		D						B			B	
90th %ile Green (s)	14.5		14.5					42.5	42.5	29.5	76.5	
90th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
70th %ile Green (s)	14.5		14.5					42.5	42.5	29.5	76.5	
70th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
50th %ile Green (s)	14.5		14.5					42.5	42.5	29.5	76.5	
50th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
30th %ile Green (s)	12.9		12.9					44.7	44.7	28.9	78.1	
30th %ile Term Code	Gap		Gap					Coord	Coord	Gap	Coord	
10th %ile Green (s)	10.5		10.5					52.3	52.3	23.7	80.5	
10th %ile Term Code	Gap		Gap					Coord	Coord	Gap	Coord	
Queue Length 50th (ft)	93		73					71	28	247	45	
Queue Length 95th (ft)	128		#159					74	97	m#397	32	
Internal Link Dist (ft)		678			654			457			444	
Turn Bay Length (ft)												
Base Capacity (vph)	461		270					2717	1614	512	3500	
Starvation Cap Reductn	0		0					0	188	0	1065	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.65		0.77					0.46	0.98	0.88	0.60	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 97 (97%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 18.1	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 210: I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	520	0	265	305	978	0	0	1189	873
Future Volume (vph)	0	0	0	520	0	265	305	978	0	0	1189	873
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		400	0		0	0		0
Storage Lanes	0		0	3		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.91	1.00	1.00	0.86	0.86
Frt						0.850					0.936	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	4545	0	1524	1517	4715	0	0	5801	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	4545	0	1524	1517	4715	0	0	5801	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						161					223	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			795			524			744	
Travel Time (s)		11.1			18.1			11.9			16.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	12%	2%	6%	19%	10%	2%	16%	8%	2%
Adj. Flow (vph)	0	0	0	565	0	288	332	1063	0	0	1292	949
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	565	0	288	332	1063	0	0	2241	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1		1	1	2			2	
Detector Template				Left		Right	Left	Thru			Thru	
Leading Detector (ft)				20		20	20	100			100	
Trailing Detector (ft)				0		0	0	0			0	
Detector 1 Position(ft)				0		0	0	0			0	
Detector 1 Size(ft)				20		20	20	6			6	
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0		0.0	0.0	0.0			0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type				Prot		Perm	Prot	NA			NA	
Protected Phases				3			5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases						8						
Detector Phase				3		8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0		5.0	5.0	5.0			5.0	
Minimum Split (s)				9.5		22.5	9.5	22.5			22.5	
Total Split (s)				22.6		22.6	32.4	77.4			45.0	
Total Split (%)				22.6%		22.6%	32.4%	77.4%			45.0%	
Maximum Green (s)				18.1		18.1	27.9	72.9			40.5	
Yellow Time (s)				3.5		3.5	3.5	3.5			3.5	
All-Red Time (s)				1.0		1.0	1.0	1.0			1.0	
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	
Total Lost Time (s)				4.5		4.5	4.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	
Recall Mode				None		None	None	C-Min			C-Min	
Walk Time (s)						7.0		7.0			7.0	
Flash Dont Walk (s)						11.0		11.0			11.0	
Pedestrian Calls (#/hr)						0		0			0	
Act Effct Green (s)				16.7		16.7	25.2	74.3			44.6	
Actuated g/C Ratio				0.17		0.17	0.25	0.74			0.45	
v/c Ratio				0.75		0.74	0.87	0.30			1.13dr	
Control Delay				46.2		29.7	47.7	1.4			17.1	
Queue Delay				0.0		0.0	0.0	0.0			0.0	
Total Delay				46.2		29.7	47.7	1.4			17.1	
LOS				D		C	D	A			B	
Approach Delay					40.6			12.4			17.1	
Approach LOS					D			B			B	
90th %ile Green (s)				18.1		18.1	27.9	72.9			40.5	
90th %ile Term Code				Max		Max	Max	Coord			Coord	
70th %ile Green (s)				18.1		18.1	27.9	72.9			40.5	
70th %ile Term Code				Max		Max	Max	Coord			Coord	
50th %ile Green (s)				17.5		17.5	27.5	73.5			41.5	
50th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
30th %ile Green (s)				16.0		16.0	24.0	75.0			46.5	
30th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
10th %ile Green (s)				13.6		13.6	18.7	77.4			54.2	
10th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
Queue Length 50th (ft)				121		75	167	0			314	
Queue Length 95th (ft)				159		#173	#330	0			397	
Internal Link Dist (ft)		407			715			444			664	
Turn Bay Length (ft)						400						
Base Capacity (vph)				822		407	423	3505			2713	
Starvation Cap Reductn				0		0	0	0			0	
Spillback Cap Reductn				0		0	0	0			0	
Storage Cap Reductn				0		0	0	0			0	
Reduced v/c Ratio				0.69		0.71	0.78	0.30			0.83	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 44 (44%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 20.1	Intersection LOS: C
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 220: I-20 WB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	39	1182	131	30	1598	5	48	13	50	121	16	35
Future Volume (vph)	39	1182	131	30	1598	5	48	13	50	121	16	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.999			0.946			0.976	
Flt Protected	0.950			0.950				0.975			0.967	
Satd. Flow (prot)	1399	4771	0	1805	4756	0	0	1673	0	0	1725	0
Flt Permitted	0.116			0.150				0.773			0.670	
Satd. Flow (perm)	171	4771	0	285	4756	0	0	1326	0	0	1195	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52			1			31			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		744			1498			395			449	
Travel Time (s)		16.9			34.0			9.0			10.2	
Peak Hour Factor	0.58	0.92	0.76	0.78	0.97	0.69	0.56	0.80	0.73	0.78	0.50	0.88
Heavy Vehicles (%)	29%	7%	5%	0%	9%	0%	0%	8%	10%	5%	0%	3%
Adj. Flow (vph)	67	1285	172	38	1647	7	86	16	68	155	32	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	1457	0	38	1654	0	0	170	0	0	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	71.8	71.8		71.8	71.8		28.2	28.2		28.2	28.2	
Total Split (%)	71.8%	71.8%		71.8%	71.8%		28.2%	28.2%		28.2%	28.2%	
Maximum Green (s)	67.3	67.3		67.3	67.3		23.7	23.7		23.7	23.7	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	69.7	69.7		69.7	69.7			21.3			21.3	
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.21			0.21	
v/c Ratio	0.56	0.44		0.19	0.50			0.56			0.87	
Control Delay	26.3	2.3		2.0	2.0			35.3			67.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	26.3	2.3		2.0	2.0			35.3			67.0	
LOS	C	A		A	A			D			E	
Approach Delay		3.4			2.0			35.3			67.0	
Approach LOS		A			A			D			E	
90th %ile Green (s)	67.3	67.3		67.3	67.3		23.7	23.7		23.7	23.7	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	67.3	67.3		67.3	67.3		23.7	23.7		23.7	23.7	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	67.3	67.3		67.3	67.3		23.7	23.7		23.7	23.7	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	70.6	70.6		70.6	70.6		20.4	20.4		20.4	20.4	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	76.2	76.2		76.2	76.2		14.8	14.8		14.8	14.8	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	7	50		2	28			76			130	
Queue Length 95th (ft)	31	61		m2	m26			122			103	
Internal Link Dist (ft)		664			1418			315			369	
Turn Bay Length (ft)	150			200								
Base Capacity (vph)	119	3342		198	3317			337			290	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.56	0.44		0.19	0.50			0.50			0.78	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 22 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 8.2	Intersection LOS: A
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 230: Wendell Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	130	479	490	251	612	55	513	514	161	80	1058	229
Future Volume (vph)	130	479	490	251	612	55	513	514	161	80	1058	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3242	3505	1553	3335	3539	1429	3303	3223	1509	3400	3312	1482
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3242	3505	1553	3335	3539	1429	3303	3223	1509	3400	3312	1482
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			248			164			171			174
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	0.94	0.94	0.94	0.88	0.88	0.88
Heavy Vehicles (%)	8%	3%	4%	5%	2%	13%	6%	12%	7%	3%	9%	9%
Adj. Flow (vph)	148	544	557	292	712	64	546	547	171	91	1202	260
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	544	557	292	712	64	546	547	171	91	1202	260
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.1	25.2	25.2	13.4	28.5	28.5	20.7	50.3	50.3	11.1	40.7	40.7
Total Split (%)	10.1%	25.2%	25.2%	13.4%	28.5%	28.5%	20.7%	50.3%	50.3%	11.1%	40.7%	40.7%
Maximum Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	45.8	45.8	6.6	36.2	36.2
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	48.0	48.0	6.5	36.2	36.2
Actuated g/C Ratio	0.06	0.21	0.21	0.09	0.24	0.24	0.16	0.48	0.48	0.06	0.36	0.36
v/c Ratio	0.82	0.75	1.08	0.99	0.84	0.14	1.02	0.35	0.21	0.41	1.00	0.40
Control Delay	80.0	44.6	84.0	95.9	46.5	0.6	76.4	12.1	4.0	67.6	46.0	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.0	44.6	84.0	95.9	46.5	0.6	76.4	12.1	4.0	67.6	46.0	3.7
LOS	E	D	F	F	D	A	E	B	A	E	D	A
Approach Delay		66.4			57.2			38.8			40.2	
Approach LOS		E			E			D			D	
90th %ile Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	45.8	45.8	6.6	36.2	36.2
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	45.8	45.8	6.6	36.2	36.2
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	45.8	45.8	6.6	36.2	36.2
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	45.8	45.8	6.6	36.2	36.2
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	5.6	20.7	20.7	8.9	24.0	24.0	16.2	56.9	56.9	0.0	36.2	36.2
10th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
Queue Length 50th (ft)	48	172	~262	97	227	0	~193	135	29	31	~404	12
Queue Length 95th (ft)	#100	226	#450	#170	281	0	#297	154	m55	m47	#535	m16
Internal Link Dist (ft)		1021			1100			1418			1649	
Turn Bay Length (ft)				250		400	350			300		
Base Capacity (vph)	181	725	518	296	849	467	535	1547	813	224	1198	647
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.75	1.08	0.99	0.84	0.14	1.02	0.35	0.21	0.41	1.00	0.40

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 84 (84%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 49.8	Intersection LOS: D
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 240: MLK Jr. Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	10	4	47	50	40	38	691	20	30	1089	20
Future Volume (vph)	4	10	4	47	50	40	38	691	20	30	1089	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	150		250
Storage Lanes	0		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.933				0.850			0.850
Flt Protected		0.987		0.950			0.950			0.950		
Satd. Flow (prot)	0	1839	1583	1770	1738	0	1612	3223	1442	1656	3312	1482
Flt Permitted		0.948		0.641			0.111			0.277		
Satd. Flow (perm)	0	1766	1583	1194	1738	0	188	3223	1442	483	3312	1482
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115		41				115			115
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		617			886			1729			1350	
Travel Time (s)		14.0			20.1			39.3			30.7	
Peak Hour Factor	0.63	0.63	0.63	0.78	0.83	0.83	0.79	0.91	0.92	0.75	0.94	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	12%	12%	12%	9%	9%	9%
Adj. Flow (vph)	6	16	6	60	60	48	48	759	22	40	1159	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	6	60	108	0	48	759	22	40	1159	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		6		5	2		7	4		3	8	

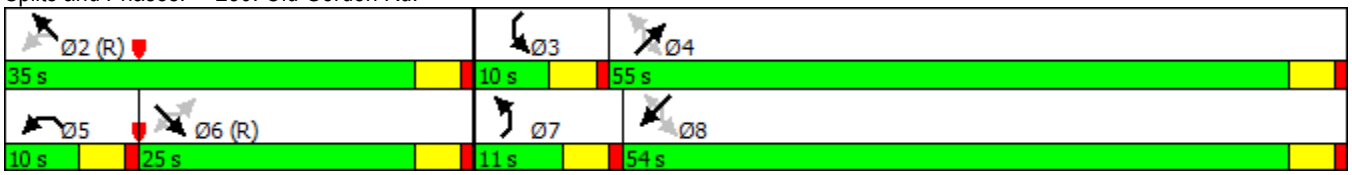
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6		6	2			4		4	8		8
Detector Phase	6	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	25.0	25.0	25.0	10.0	35.0		11.0	55.0	55.0	10.0	54.0	54.0
Total Split (%)	25.0%	25.0%	25.0%	10.0%	35.0%		11.0%	55.0%	55.0%	10.0%	54.0%	54.0%
Maximum Green (s)	20.5	20.5	20.5	5.5	30.5		6.5	50.5	50.5	5.5	49.5	49.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0			0	0		0	0
Act Effct Green (s)		31.1	31.1	40.0	40.0		48.9	45.0	45.0	47.7	44.4	44.4
Actuated g/C Ratio		0.31	0.31	0.40	0.40		0.49	0.45	0.45	0.48	0.44	0.44
v/c Ratio		0.04	0.01	0.12	0.15		0.27	0.52	0.03	0.14	0.79	0.03
Control Delay		31.6	0.0	23.7	15.8		8.0	17.7	1.4	10.6	27.9	0.1
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		31.6	0.0	23.7	15.8		8.0	17.7	1.4	10.6	27.9	0.1
LOS		C	A	C	B		A	B	A	B	C	A
Approach Delay		24.8			18.6			16.7			26.8	
Approach LOS		C			B			B			C	
90th %ile Green (s)	20.5	20.5	20.5	5.5	30.5		6.5	50.5	50.5	5.5	49.5	49.5
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	20.5	20.5	20.5	6.7	31.7		6.5	49.3	49.3	5.5	48.3	48.3
70th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold	Hold	Max	Gap	Gap
50th %ile Green (s)	22.1	22.1	22.1	7.8	34.4		6.5	46.6	46.6	5.5	45.6	45.6
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Max	Hold	Hold	Max	Gap	Gap
30th %ile Green (s)	38.2	38.2	38.2	6.5	49.2		0.0	41.8	41.8	0.0	41.8	41.8
30th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Skip	Hold	Hold	Skip	Gap	Gap
10th %ile Green (s)	54.3	54.3	54.3	0.0	54.3		0.0	36.7	36.7	0.0	36.7	36.7
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Skip	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)		11	0	26	29		10	183	0	11	315	0
Queue Length 95th (ft)		22	0	50	64		m15	232	m5	19	369	0
Internal Link Dist (ft)		537			806			1649			1270	
Turn Bay Length (ft)							150			150		250
Base Capacity (vph)		549	571	514	719		184	1627	785	294	1639	791
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.01	0.12	0.15		0.26	0.47	0.03	0.14	0.71	0.03

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 50.6%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 250: Old Gordon Rd.



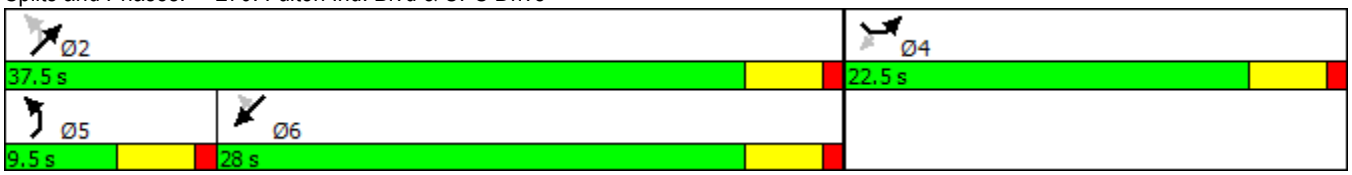
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	149	149	100	635	990	0
Future Volume (vph)	149	149	100	635	990	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1863
Flt Permitted	0.950		0.160			
Satd. Flow (perm)	1770	1583	298	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		162				
Link Speed (mph)	30			30	30	
Link Distance (ft)	912			1889	1254	
Travel Time (s)	20.7			42.9	28.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	162	162	109	690	1076	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	162	162	109	690	1076	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	9.5	37.5	28.0	28.0
Total Split (%)	37.5%	37.5%	15.8%	62.5%	46.7%	46.7%
Maximum Green (s)	18.0	18.0	5.0	33.0	23.5	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	10.3	10.3	35.8	35.8	27.9	
Actuated g/C Ratio	0.19	0.19	0.65	0.65	0.51	
v/c Ratio	0.49	0.38	0.33	0.30	0.60	
Control Delay	24.3	6.5	7.2	5.0	12.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	24.3	6.5	7.2	5.0	12.8	
LOS	C	A	A	A	B	
Approach Delay	15.4			5.3	12.8	
Approach LOS	B			A	B	
90th %ile Green (s)	14.1	14.1	5.0	33.0	23.5	23.5
90th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
70th %ile Green (s)	11.6	11.6	5.0	33.0	23.5	23.5
70th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
50th %ile Green (s)	9.9	9.9	5.0	33.0	23.5	23.5
50th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
30th %ile Green (s)	8.4	8.4	5.0	33.0	23.5	23.5
30th %ile Term Code	Gap	Gap	Max	MaxR	MaxR	MaxR
10th %ile Green (s)	6.7	6.7	0.0	48.0	48.0	48.0
10th %ile Term Code	Gap	Gap	Skip	Dwell	Dwell	Dwell
Queue Length 50th (ft)	45	0	10	40	126	
Queue Length 95th (ft)	89	37	30	78	214	
Internal Link Dist (ft)	832			1809	1174	
Turn Bay Length (ft)						
Base Capacity (vph)	581	628	328	2298	1790	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.28	0.26	0.33	0.30	0.60	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 55.1	
Natural Cycle: 60	

Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 52.4%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 56.1	
70th %ile Actuated Cycle: 53.6	
50th %ile Actuated Cycle: 51.9	
30th %ile Actuated Cycle: 50.4	
10th %ile Actuated Cycle: 63.7	

Splits and Phases: 270: Fulton Ind. Blvd & UPS Drive



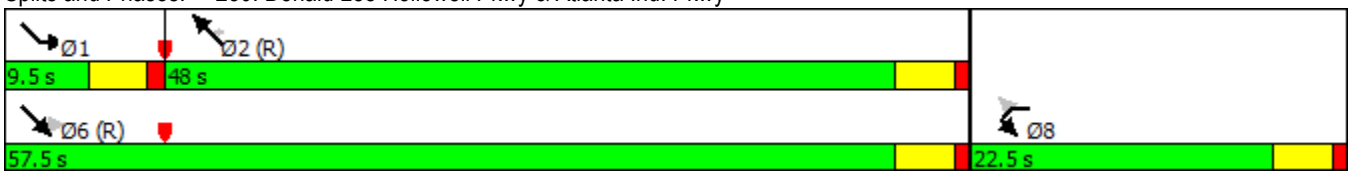
Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	85	0	28	651	1417	0
Future Volume (vph)	85	0	28	651	1417	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300			0
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1570	1652	1570	3139	3139	1652
Flt Permitted	0.950		0.110			
Satd. Flow (perm)	1570	1652	182	3139	3139	1652
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1300			1130	416	
Travel Time (s)	29.5			25.7	9.5	
Peak Hour Factor	0.82	0.92	0.64	0.91	0.94	0.92
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%
Adj. Flow (vph)	104	0	44	715	1507	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	104	0	44	715	1507	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	8		1	6	2	

Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Permitted Phases		8	6			2
Detector Phase	8	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	9.5	57.5	48.0	48.0
Total Split (%)	28.1%	28.1%	11.9%	71.9%	60.0%	60.0%
Maximum Green (s)	18.0	18.0	5.0	53.0	43.5	43.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	10.6		62.6	63.5	56.9	
Actuated g/C Ratio	0.13		0.78	0.79	0.71	
v/c Ratio	0.50		0.18	0.29	0.68	
Control Delay	39.8		4.7	3.6	4.5	
Queue Delay	0.0		0.0	0.0	0.3	
Total Delay	39.8		4.7	3.6	4.7	
LOS	D		A	A	A	
Approach Delay	39.8			3.6	4.7	
Approach LOS	D			A	A	
90th %ile Green (s)	14.9	14.9	7.1	56.1	44.5	44.5
90th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
70th %ile Green (s)	12.4	12.4	6.4	58.6	47.7	47.7
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	10.6	10.6	6.0	60.4	49.9	49.9
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	8.8	8.8	0.0	62.2	62.2	62.2
30th %ile Term Code	Gap	Gap	Skip	Coord	Coord	Coord
10th %ile Green (s)	0.0	0.0	0.0	75.5	75.5	75.5
10th %ile Term Code	Skip	Skip	Skip	Coord	Coord	Coord
Queue Length 50th (ft)	49		4	46	46	
Queue Length 95th (ft)	82		10	83	66	
Internal Link Dist (ft)	1220			1050	336	
Turn Bay Length (ft)			300			
Base Capacity (vph)	353		248	2490	2231	
Starvation Cap Reductn	0		0	0	198	
Spillback Cap Reductn	0		0	0	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.29		0.18	0.29	0.74	

Intersection Summary

Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 72 (90%), Referenced to phase 2:NWT and 6:SETL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 280: Donald Lee Hollowell Pkwy & Atlanta Ind. Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	55	807	100	230	1328	0	55	148	0	16	203	127
Future Volume (vph)	55	807	100	230	1328	0	55	148	0	16	203	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		200	300		0	300		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.941	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1570	3139	1404	1570	3139	0	1570	3139	0	1570	2954	0
Flt Permitted	0.129			0.174			0.335			0.629		
Satd. Flow (perm)	213	3139	1404	287	3139	0	553	3139	0	1039	2954	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			205								148	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			899			1051			1138	
Travel Time (s)		9.5			20.4			23.9			25.9	
Peak Hour Factor	0.98	0.93	0.92	0.82	0.95	0.92	0.92	0.76	0.92	0.67	0.88	0.86
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Adj. Flow (vph)	56	868	109	280	1398	0	60	195	0	24	231	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	868	109	280	1398	0	60	195	0	24	379	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	33.0	33.0	15.0	38.5		9.5	22.5		9.5	22.5	
Total Split (%)	11.9%	41.3%	41.3%	18.8%	48.1%		11.9%	28.1%		11.9%	28.1%	
Maximum Green (s)	5.0	28.5	28.5	10.5	34.0		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	40.0	33.8	33.8	51.4	44.8		17.8	15.8		16.0	12.0	
Actuated g/C Ratio	0.50	0.42	0.42	0.64	0.56		0.22	0.20		0.20	0.15	
v/c Ratio	0.27	0.65	0.15	0.71	0.80		0.32	0.32		0.10	0.67	
Control Delay	11.9	22.1	0.8	24.0	26.2		25.5	28.4		20.9	24.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.9	22.1	0.8	24.0	26.2		25.5	28.4		20.9	24.7	
LOS	B	C	A	C	C		C	C		C	C	
Approach Delay		19.3			25.8			27.7			24.5	
Approach LOS		B			C			C			C	
90th %ile Green (s)	5.7	28.5	28.5	11.2	34.0		5.0	17.3		5.0	17.3	
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Hold		Max	Gap	
70th %ile Green (s)	7.2	28.5	28.5	14.8	36.1		5.0	13.7		5.0	13.7	
70th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	6.6	29.5	29.5	15.7	38.6		5.0	21.3		0.0	11.8	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Max	Hold		Skip	Gap	
30th %ile Green (s)	0.0	33.6	33.6	13.5	51.6		5.0	19.4		0.0	9.9	
30th %ile Term Code	Skip	Coord	Coord	Gap	Coord		Max	Hold		Skip	Gap	
10th %ile Green (s)	0.0	49.1	49.1	10.1	63.7		0.0	7.3		0.0	7.3	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord		Skip	Gap		Skip	Hold	
Queue Length 50th (ft)	9	203	0	98	295		23	40		9	56	
Queue Length 95th (ft)	23	278	0	m#179	#554		47	60		18	90	
Internal Link Dist (ft)		336			819			971			1058	
Turn Bay Length (ft)	200		200	300			300			200		
Base Capacity (vph)	211	1327	712	395	1757		186	743		240	779	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.27	0.65	0.15	0.71	0.80		0.32	0.26		0.10	0.49	

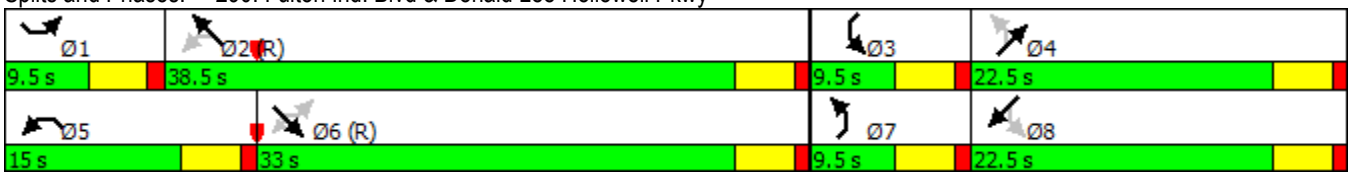
Intersection Summary

Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 73 (91%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 23.8	Intersection LOS: C
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 290: Fulton Ind. Blvd & Donald Lee Hollowell Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	931	45	118	1395	42	32	49	63	46	73	49
Future Volume (vph)	6	931	45	118	1395	42	32	49	63	46	73	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.996			0.941			0.960	
Flt Protected	0.950			0.950				0.989			0.987	
Satd. Flow (prot)	1805	3301	0	1787	3189	0	0	1734	0	0	1760	0
Flt Permitted	0.088			0.179				0.854			0.830	
Satd. Flow (perm)	167	3301	0	337	3189	0	0	1497	0	0	1480	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			6			45			24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		899			304			783			722	
Travel Time (s)		20.4			6.9			17.8			16.4	
Peak Hour Factor	0.90	0.90	0.90	0.78	0.78	0.78	0.95	0.95	0.95	0.88	0.88	0.88
Heavy Vehicles (%)	0%	9%	0%	1%	13%	5%	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	7	1034	50	151	1788	54	34	52	66	52	83	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1084	0	151	1842	0	0	152	0	0	191	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.6	43.0		14.4	47.8		22.6	22.6		22.6	22.6	
Total Split (%)	12.0%	53.8%		18.0%	59.8%		28.3%	28.3%		28.3%	28.3%	
Maximum Green (s)	5.1	38.5		9.9	43.3		18.1	18.1		18.1	18.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	50.8	45.4		57.6	55.7			13.4			13.4	
Actuated g/C Ratio	0.64	0.57		0.72	0.70			0.17			0.17	
v/c Ratio	0.03	0.58		0.40	0.83			0.53			0.71	
Control Delay	1.5	3.3		5.9	10.0			27.0			41.8	
Queue Delay	0.0	0.0		0.0	0.6			0.0			0.0	
Total Delay	1.5	3.3		5.9	10.6			27.0			41.8	
LOS	A	A		A	B			C			D	
Approach Delay		3.3			10.3			27.0			41.8	
Approach LOS		A			B			C			D	
90th %ile Green (s)	5.1	38.5		9.9	43.3		18.1	18.1		18.1	18.1	
90th %ile Term Code	Max	Coord		Max	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	0.0	41.8		8.5	54.8		16.2	16.2		16.2	16.2	
70th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	0.0	45.3		7.5	57.3		13.7	13.7		13.7	13.7	
50th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	0.0	48.4		6.8	59.7		11.3	11.3		11.3	11.3	
30th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	52.8		5.9	63.2		7.8	7.8		7.8	7.8	
10th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	0	28		7	79			48			79	
Queue Length 95th (ft)	m1	41		m18	#512			98			135	
Internal Link Dist (ft)		819			224			703			642	
Turn Bay Length (ft)	400			150								
Base Capacity (vph)	217	1875		421	2220			373			353	
Starvation Cap Reductn	0	0		0	119			0			0	
Spillback Cap Reductn	0	30		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.03	0.59		0.36	0.88			0.41			0.54	

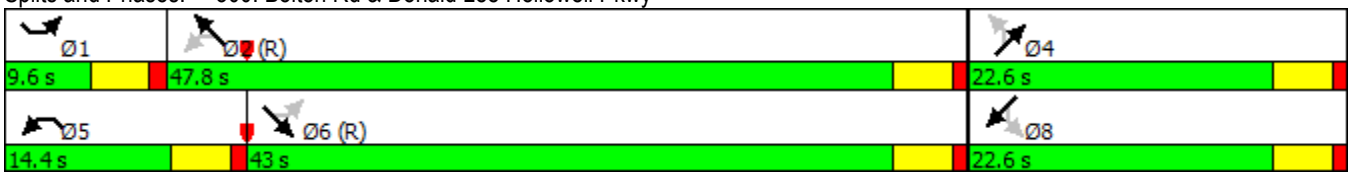
Intersection Summary

Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 5 (6%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 10.6	Intersection LOS: B
Intersection Capacity Utilization 68.9%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 300: Bolton Rd & Donald Lee Hollowell Pkwy



Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	0	0	0	643	389	160	1141	0	128	0	429
Future Volume (vph)	0	0	0	643	389	160	1141	0	128	0	429
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00
Frt				0.944							0.850
Flt Protected						0.950			0.950		
Satd. Flow (prot)	0	0	0	3152	0	1467	3343	0	2694	0	1335
Flt Permitted						0.109			0.950		
Satd. Flow (perm)	0	0	0	3152	0	168	3343	0	2694	0	1335
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				182							82
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	922			304			568			593	
Travel Time (s)	21.0			6.9			12.9			13.5	
Peak Hour Factor	0.92	0.92	0.95	0.95	0.95	0.96	0.96	0.96	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	10%	5%	23%	8%	2%	30%	2%	21%
Adj. Flow (vph)	0	0	0	677	409	167	1189	0	135	0	452
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	0	1086	0	167	1189	0	135	0	452
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			24			24			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors				2		1	2		1		1
Detector Template				Thru		Left	Thru		Left		Right
Leading Detector (ft)				100		20	100		20		20
Trailing Detector (ft)				0		0	0		0		0
Detector 1 Position(ft)				0		0	0		0		0
Detector 1 Size(ft)				6		20	6		20		20
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type				NA		pm+pt	NA		Prot		Perm
Protected Phases				6		5	2		3		
Permitted Phases						2					8
Detector Phase				6		5	2		3		8
Switch Phase											

Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Minimum Initial (s)				5.0		5.0	5.0		5.0		5.0
Minimum Split (s)				22.5		9.5	22.5		9.5		22.5
Total Split (s)				35.0		13.0	48.0		32.0		32.0
Total Split (%)				43.8%		16.3%	60.0%		40.0%		40.0%
Maximum Green (s)				30.5		8.5	43.5		27.5		27.5
Yellow Time (s)				3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)				0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)				4.5		4.5	4.5		4.5		4.5
Lead/Lag				Lag		Lead					
Lead-Lag Optimize?				Yes		Yes					
Vehicle Extension (s)				3.0		3.0	3.0		3.0		3.0
Recall Mode				C-Min		None	C-Min		None		None
Walk Time (s)				7.0			7.0				7.0
Flash Dont Walk (s)				11.0			11.0				11.0
Pedestrian Calls (#/hr)				0			0				0
Act Effct Green (s)				32.2		45.2	45.2		25.8		25.8
Actuated g/C Ratio				0.40		0.56	0.56		0.32		0.32
v/c Ratio				0.79		0.72	0.63		0.16		0.93
Control Delay				8.8		31.2	8.8		19.1		49.5
Queue Delay				0.5		0.0	0.1		0.0		1.3
Total Delay				9.3		31.2	8.9		19.1		50.9
LOS				A		C	A		B		D
Approach Delay				9.3			11.7			43.6	
Approach LOS				A			B			D	
90th %ile Green (s)				30.5		8.5	43.5		27.5		27.5
90th %ile Term Code				Coord		Max	Coord		Hold		Max
70th %ile Green (s)				30.5		8.5	43.5		27.5		27.5
70th %ile Term Code				Coord		Max	Coord		Hold		Max
50th %ile Green (s)				30.5		8.5	43.5		27.5		27.5
50th %ile Term Code				Coord		Max	Coord		Hold		Max
30th %ile Green (s)				30.6		9.3	44.4		26.6		26.6
30th %ile Term Code				Coord		Gap	Coord		Hold		Gap
10th %ile Green (s)				39.1		7.3	50.9		20.1		20.1
10th %ile Term Code				Coord		Gap	Coord		Hold		Gap
Queue Length 50th (ft)				40		52	176		23		176
Queue Length 95th (ft)				72		m#99	216		43		#355
Internal Link Dist (ft)	842			224			488			513	
Turn Bay Length (ft)											
Base Capacity (vph)				1379		235	1886		926		512
Starvation Cap Reductn				66		0	0		0		0
Spillback Cap Reductn				0		0	117		0		11
Storage Cap Reductn				0		0	0		0		0
Reduced v/c Ratio				0.83		0.71	0.67		0.15		0.90

Intersection Summary

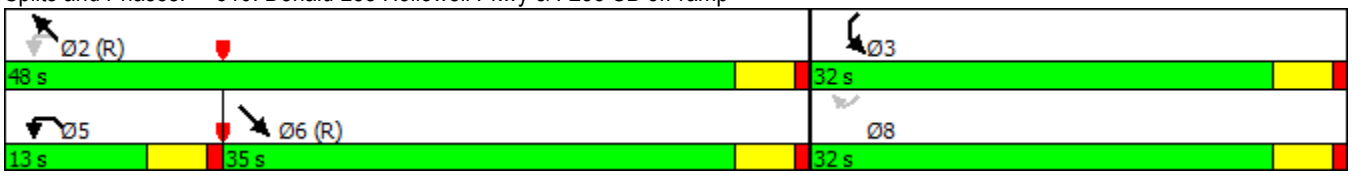
Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80

Offset: 16 (20%), Referenced to phase 2:NWTL and 6:SET, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 17.0	Intersection LOS: B
Intersection Capacity Utilization 65.6%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 310: Donald Lee Hollowell Pkwy & I-285 SB off-ramp



Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (vph)	0	0	332	427	0	0	702	142	576	0	246
Future Volume (vph)	0	0	332	427	0	0	702	142	576	0	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300		0	0		0		0	0
Storage Lanes	0	0	1		0	0		0		2	1
Taper Length (ft)	25		25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00
Frt							0.975				0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1504	3167	0	0	4542	0	3213	0	1262
Flt Permitted			0.192						0.950		
Satd. Flow (perm)	0	0	304	3167	0	0	4542	0	3213	0	1262
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)							53				415
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	782			568			1114			887	
Travel Time (s)	17.8			12.9			25.3			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.86	0.86
Heavy Vehicles (%)	2%	2%	20%	14%	2%	2%	10%	18%	9%	2%	28%
Adj. Flow (vph)	0	0	361	464	0	0	763	154	670	0	286
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	361	464	0	0	917	0	670	0	286
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			pm+pt	NA			NA		Prot		Perm
Protected Phases			5	2			6		3		

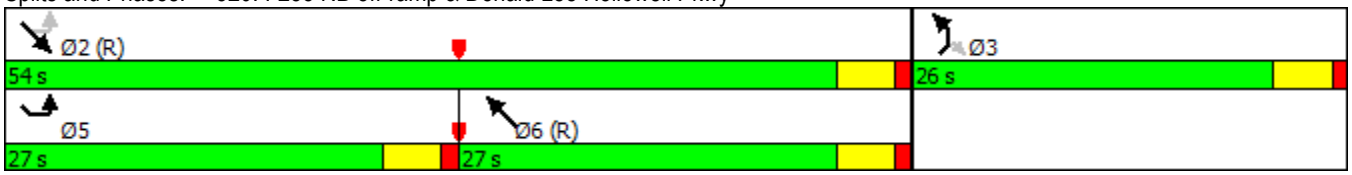
Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Permitted Phases			2								3
Detector Phase			5	2			6		3		3
Switch Phase											
Minimum Initial (s)			5.0	5.0			5.0		5.0		5.0
Minimum Split (s)			9.5	22.5			22.5		9.5		9.5
Total Split (s)			27.0	54.0			27.0		26.0		26.0
Total Split (%)			33.8%	67.5%			33.8%		32.5%		32.5%
Maximum Green (s)			22.5	49.5			22.5		21.5		21.5
Yellow Time (s)			3.5	3.5			3.5		3.5		3.5
All-Red Time (s)			1.0	1.0			1.0		1.0		1.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			4.5	4.5			4.5		4.5		4.5
Lead/Lag			Lead				Lag				
Lead-Lag Optimize?			Yes				Yes				
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			Min	C-Min			C-Min		None		None
Walk Time (s)				7.0			7.0				
Flash Dont Walk (s)				11.0			11.0				
Pedestrian Calls (#/hr)				0			0				
Act Effct Green (s)			50.7	50.7			28.6		20.3		20.3
Actuated g/C Ratio			0.63	0.63			0.36		0.25		0.25
v/c Ratio			0.79	0.23			0.55		0.82		0.45
Control Delay			15.8	1.9			22.3		37.6		2.6
Queue Delay			0.0	0.0			0.0		0.0		0.0
Total Delay			15.8	1.9			22.3		37.6		2.6
LOS			B	A			C		D		A
Approach Delay				8.0			22.3			27.2	
Approach LOS				A			C			C	
90th %ile Green (s)			22.5	49.5			22.5		21.5		21.5
90th %ile Term Code			Max	Coord			Coord		Max		Max
70th %ile Green (s)			22.5	49.5			22.5		21.5		21.5
70th %ile Term Code			Max	Coord			Coord		Max		Max
50th %ile Green (s)			18.9	49.5			26.1		21.5		21.5
50th %ile Term Code			Gap	Coord			Coord		Max		Max
30th %ile Green (s)			14.6	50.6			31.5		20.4		20.4
30th %ile Term Code			Gap	Coord			Coord		Gap		Gap
10th %ile Green (s)			9.6	54.5			40.4		16.5		16.5
10th %ile Term Code			Gap	Coord			Coord		Gap		Gap
Queue Length 50th (ft)			15	9			130		159		0
Queue Length 95th (ft)			m50	m11			186		207		0
Internal Link Dist (ft)	702			488			1034			807	
Turn Bay Length (ft)			300								
Base Capacity (vph)			530	2007			1657		863		642
Starvation Cap Reductn			0	0			0		0		0
Spillback Cap Reductn			0	0			0		0		0
Storage Cap Reductn			0	0			0		0		0
Reduced v/c Ratio			0.68	0.23			0.55		0.78		0.45

Intersection Summary

Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 58 (73%), Referenced to phase 2:SETL and 6:NWT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 19.7	Intersection LOS: B
Intersection Capacity Utilization 65.6%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 320: I-285 NB off-ramp & Donald Lee Hollowell Pkwy



2031 AM Synchro Analysis Report

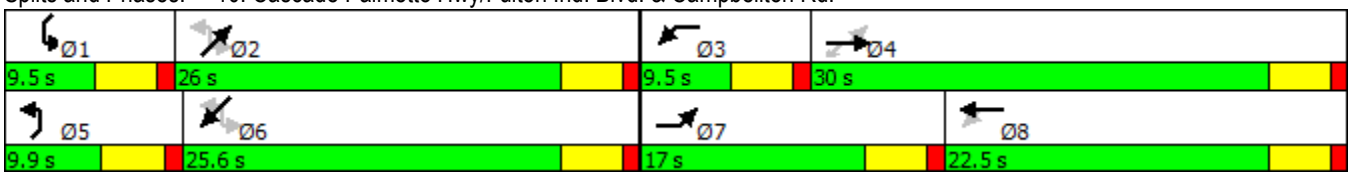
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	318	390	54	37	190	67	69	577	109	14	151	128
Future Volume (vph)	318	390	54	37	190	67	69	577	109	14	151	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	400		400	300		300
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.961				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1810	1482	1752	1682	0	1805	3438	1568	1327	2983	1468
Flt Permitted	0.289			0.476			0.520			0.241		
Satd. Flow (perm)	533	1810	1482	878	1682	0	988	3438	1568	337	2983	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153		22				218			218
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			851			3037			3592	
Travel Time (s)		18.4			19.3			69.0			81.6	
Peak Hour Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.82	0.82	0.82	0.86	0.86	0.86
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	3%	5%	9%	3%	7%	13%	0%	5%	3%	36%	21%	10%
Adj. Flow (vph)	388	476	66	45	230	81	98	816	154	19	204	173
Shared Lane Traffic (%)												
Lane Group Flow (vph)	388	476	66	45	311	0	98	816	154	19	204	173
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	17.0	30.0	30.0	9.5	22.5		9.9	26.0	26.0	9.5	25.6	25.6
Total Split (%)	22.7%	40.0%	40.0%	12.7%	30.0%		13.2%	34.7%	34.7%	12.7%	34.1%	34.1%
Maximum Green (s)	12.5	25.5	25.5	5.0	18.0		5.4	21.5	21.5	5.0	21.1	21.1
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	32.4	27.1	27.1	20.2	15.2		20.8	19.9	19.9	17.8	13.9	13.9
Actuated g/C Ratio	0.51	0.43	0.43	0.32	0.24		0.33	0.32	0.32	0.28	0.22	0.22
v/c Ratio	0.75	0.61	0.09	0.13	0.74		0.25	0.75	0.24	0.11	0.31	0.35
Control Delay	22.8	21.4	0.3	11.0	33.8		16.4	25.8	2.1	15.6	23.4	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	21.4	0.3	11.0	33.8		16.4	25.8	2.1	15.6	23.4	3.9
LOS	C	C	A	B	C		B	C	A	B	C	A
Approach Delay		20.5			30.9			21.5			14.5	
Approach LOS		C			C			C			B	
90th %ile Green (s)	12.5	25.5	25.5	5.0	18.0		5.4	21.5	21.5	5.0	21.1	21.1
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Max	Max	Max	Hold	Hold
70th %ile Green (s)	12.5	25.5	25.5	5.0	18.0		5.4	21.6	21.6	0.0	11.7	11.7
70th %ile Term Code	Max	Max	Max	Max	Max		Max	Hold	Hold	Skip	Gap	Gap
50th %ile Green (s)	12.5	24.1	24.1	5.0	16.6		5.4	21.5	21.5	0.0	11.6	11.6
50th %ile Term Code	Max	Hold	Hold	Max	Gap		Max	Max	Max	Skip	Hold	Hold
30th %ile Green (s)	12.5	30.9	30.9	0.0	13.9		5.4	20.5	20.5	0.0	10.6	10.6
30th %ile Term Code	Max	Hold	Hold	Skip	Gap		Max	Gap	Gap	Skip	Hold	Hold
10th %ile Green (s)	12.5	27.0	27.0	0.0	10.0		0.0	14.6	14.6	0.0	14.6	14.6
10th %ile Term Code	Max	Hold	Hold	Skip	Gap		Skip	Gap	Gap	Skip	Hold	Hold
Queue Length 50th (ft)	85	153	0	8	101		26	143	0	5	37	0
Queue Length 95th (ft)	#240	#341	0	27	#240		51	223	8	16	62	21
Internal Link Dist (ft)		728			771			2957			3512	
Turn Bay Length (ft)	300		300	300			400		400	300		300
Base Capacity (vph)	519	786	730	352	503		397	1191	685	174	1013	642
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.61	0.09	0.13	0.62		0.25	0.69	0.22	0.11	0.20	0.27

Intersection Summary

Area Type: Other	
Cycle Length: 75	
Actuated Cycle Length: 63.1	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 21.4	Intersection LOS: C
Intersection Capacity Utilization 74.4%	ICU Level of Service D
Analysis Period (min) 15	
90th %ile Actuated Cycle: 75	
70th %ile Actuated Cycle: 65.6	
50th %ile Actuated Cycle: 64.1	
30th %ile Actuated Cycle: 60.4	
10th %ile Actuated Cycle: 50.6	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 10: Cascade Palmetto Hwy/Fulton Ind. Blvd. & Campbellton Rd.



Intersection	
Int Delay, s/veh	4.6

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	40	19	37	1125	4	412	48
Future Vol, veh/h	40	19	37	1125	4	412	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Yield
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	57	57	96	96	86	86	86
Heavy Vehicles, %	33	37	24	4	0	14	15
Mvmt Flow	81	39	45	1359	5	556	65

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1336	278	556	0	992	-	0
Stage 1	567	-	-	-	-	-	-
Stage 2	769	-	-	-	-	-	-
Critical Hdwy	7.46	7.64	4.58	-	6.4	-	-
Critical Hdwy Stg 1	6.46	-	-	-	-	-	-
Critical Hdwy Stg 2	6.46	-	-	-	-	-	-
Follow-up Hdwy	3.83	3.67	2.44	-	2.5	-	-
Pot Cap-1 Maneuver	111	624	873	-	342	-	-
Stage 1	453	-	-	-	-	-	-
Stage 2	346	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	105	624	873	-	342	-	-
Mov Cap-2 Maneuver	105	-	-	-	-	-	-
Stage 1	453	-	-	-	-	-	-
Stage 2	328	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	77.6	0.3	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	873	-	105	624	342	-	-
HCM Lane V/C Ratio	0.051	-	0.775	0.062	0.016	-	-
HCM Control Delay (s)	9.3	-	109.2	11.2	15.7	-	-
HCM Lane LOS	A	-	F	B	C	-	-
HCM 95th %tile Q(veh)	0.2	-	4.2	0.2	0	-	-

Intersection	
Int Delay, s/veh	100.1

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	79	45	46	1449	3	451	92
Future Vol, veh/h	79	45	46	1449	3	451	92
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Free
Storage Length	0	0	300	-	250	-	300
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	41	41	91	91	92	92	92
Heavy Vehicles, %	34	18	9	4	0	12	35
Mvmt Flow	224	127	59	1847	4	569	116

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1617	284	569	0	1348	-	0
Stage 1	576	-	-	-	-	-	-
Stage 2	1041	-	-	-	-	-	-
Critical Hdwy	7.48	7.26	4.28	-	6.4	-	-
Critical Hdwy Stg 1	6.48	-	-	-	-	-	-
Critical Hdwy Stg 2	6.48	-	-	-	-	-	-
Follow-up Hdwy	3.84	3.48	2.29	-	2.5	-	-
Pot Cap-1 Maneuver	~ 68	667	953	-	202	-	0
Stage 1	445	-	-	-	-	-	0
Stage 2	238	-	-	-	-	-	0
Platoon blocked, %				-		-	
Mov Cap-1 Maneuver	~ 64	667	953	-	202	-	-
Mov Cap-2 Maneuver	~ 64	-	-	-	-	-	-
Stage 1	445	-	-	-	-	-	-
Stage 2	~ 223	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 804.9	0.3	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT
Capacity (veh/h)	953	-	64	667	202	-
HCM Lane V/C Ratio	0.062	-	3.492	0.191	0.019	-
HCM Control Delay (s)	9	$	1256.8	11.7	23.2	-
HCM Lane LOS	A	-	F	B	C	-
HCM 95th %tile Q(veh)	0.2	-	23.5	0.7	0.1	-

Notes

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

Intersection	
Int Delay, s/veh	71.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	38	16	33	39	22	54	74	820	24	22	464	61
Future Vol, veh/h	38	16	33	39	22	54	74	820	24	22	464	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	300	-	200	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	81	81	81	89	89	89	97	97	97
Heavy Vehicles, %	35	0	42	8	0	4	10	12	21	0	20	25
Mvmt Flow	57	24	49	56	32	77	96	1069	31	26	555	73

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1351	1870	277	1604	1870	534	555	0	0	1069	0	0
Stage 1	608	608	-	1262	1262	-	-	-	-	-	-	-
Stage 2	743	1262	-	342	608	-	-	-	-	-	-	-
Critical Hdwy	8.2	6.5	7.74	7.66	6.5	6.98	4.3	-	-	4.1	-	-
Critical Hdwy Stg 1	7.2	5.5	-	6.66	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.2	5.5	-	6.66	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.85	4	3.72	3.58	4	3.34	2.3	-	-	2.2	-	-
Pot Cap-1 Maneuver	81	73	613	66	73	485	958	-	-	660	-	-
Stage 1	377	489	-	171	243	-	-	-	-	-	-	-
Stage 2	307	243	-	630	489	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 37	63	613	~ 39	63	485	958	-	-	660	-	-
Mov Cap-2 Maneuver	~ 37	63	-	~ 39	63	-	-	-	-	-	-	-
Stage 1	339	470	-	154	219	-	-	-	-	-	-	-
Stage 2	199	219	-	529	470	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	$ 399.3	$ 614.5	0.7	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SELn2	SWL	SWT	SWR
Capacity (veh/h)	958	-	-	79	42	613	660	-	-
HCM Lane V/C Ratio	0.101	-	-	2.085	1.912	0.08	0.04	-	-
HCM Control Delay (s)	9.2	-	-	$ 614.5	$ 636.3	11.4	10.7	-	-
HCM Lane LOS	A	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	14.9	8.4	0.3	0.1	-	-

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	250		0	250		150
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1863	0	1863	3539	0	1863	3539	1863
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1863	0	1863	3539	0	1863	3539	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1019			888			1369			1113	
Travel Time (s)		23.2			20.2			31.1			25.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type							Perm			Perm		Perm
Protected Phases		4			8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	22.5
Total Split (s)	38.5	38.5		38.5	38.5		36.5	36.5		36.5	36.5	36.5
Total Split (%)	51.3%	51.3%		51.3%	51.3%		48.7%	48.7%		48.7%	48.7%	48.7%
Maximum Green (s)	34.0	34.0		34.0	34.0		32.0	32.0		32.0	32.0	32.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		Min	Min		Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)												
Actuated g/C Ratio												
v/c Ratio												
Control Delay												
Queue Delay												
Total Delay												
LOS												
Approach Delay												
Approach LOS												
90th %ile Green (s)	34.0	34.0		34.0	34.0		32.0	32.0		32.0	32.0	32.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Hold	Hold		MaxR	MaxR	MaxR
70th %ile Green (s)	34.0	34.0		34.0	34.0		32.0	32.0		32.0	32.0	32.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Hold	Hold		MaxR	MaxR	MaxR
50th %ile Green (s)	34.0	34.0		34.0	34.0		32.0	32.0		32.0	32.0	32.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Hold	Hold		MaxR	MaxR	MaxR
30th %ile Green (s)	34.0	34.0		34.0	34.0		32.0	32.0		32.0	32.0	32.0
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Hold	Hold		MaxR	MaxR	MaxR
10th %ile Green (s)	34.0	34.0		34.0	34.0		32.0	32.0		32.0	32.0	32.0
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Hold	Hold		MaxR	MaxR	MaxR
Queue Length 50th (ft)												
Queue Length 95th (ft)												
Internal Link Dist (ft)		939			808			1289			1033	
Turn Bay Length (ft)												
Base Capacity (vph)												
Starvation Cap Reductn												
Spillback Cap Reductn												
Storage Cap Reductn												
Reduced v/c Ratio												

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	71	50	50	36	50	100	676	50	126	798	100
Future Volume (vph)	100	71	50	50	36	50	100	676	50	126	798	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		150
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.938			0.950			0.990				0.850
Flt Protected	0.950				0.982		0.950			0.950		
Satd. Flow (prot)	1128	1114	0	0	1477	0	1128	2978	0	1504	3008	897
Flt Permitted	0.512				0.819		0.157			0.196		
Satd. Flow (perm)	608	1114	0	0	1232	0	186	2978	0	310	3008	897
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			34			11				143
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		812			1105			708			889	
Travel Time (s)		18.5			25.1			16.1			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	60%	60%	60%	20%	20%	20%	60%	20%	20%	20%	20%	80%
Adj. Flow (vph)	126	90	63	63	45	63	126	852	63	159	1006	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	153	0	0	171	0	126	915	0	159	1006	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	Perm

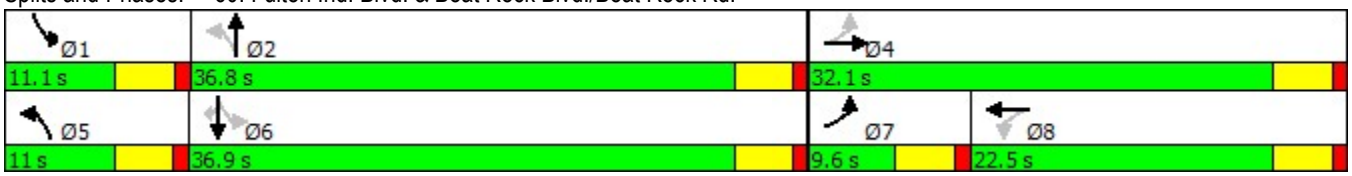
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	9.6	32.1		22.5	22.5		11.0	36.8		11.1	36.9	36.9
Total Split (%)	12.0%	40.1%		28.1%	28.1%		13.8%	46.0%		13.9%	46.1%	46.1%
Maximum Green (s)	5.1	27.6		18.0	18.0		6.5	32.3		6.6	32.4	32.4
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		Min	Min		None	Min		None	Min	Min
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0			0	0
Act Effct Green (s)	19.8	19.8			12.8		35.3	28.4		35.3	28.5	28.5
Actuated g/C Ratio	0.29	0.29			0.18		0.51	0.41		0.51	0.41	0.41
v/c Ratio	0.59	0.43			0.67		0.67	0.75		0.58	0.81	0.28
Control Delay	32.9	18.6			36.8		32.3	22.6		19.2	25.7	4.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	32.9	18.6			36.8		32.3	22.6		19.2	25.7	4.2
LOS	C	B			D		C	C		B	C	A
Approach Delay		25.1			36.8			23.7			22.8	
Approach LOS		C			D			C			C	
90th %ile Green (s)	5.1	27.6		18.0	18.0		6.5	32.3		6.6	32.4	32.4
90th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	Max
70th %ile Green (s)	5.1	26.5		16.9	16.9		6.5	32.3		6.6	32.4	32.4
70th %ile Term Code	Max	Hold		Gap	Gap		Max	Max		Max	Max	Max
50th %ile Green (s)	5.1	23.2		13.6	13.6		6.5	32.3		6.6	32.4	32.4
50th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Max	Max
30th %ile Green (s)	5.1	20.2		10.6	10.6		6.5	28.0		6.6	28.1	28.1
30th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Gap	Gap
10th %ile Green (s)	0.0	6.4		6.4	6.4		6.5	17.6		6.3	17.4	17.4
10th %ile Term Code	Skip	Hold		Gap	Gap		Max	Hold		Gap	Gap	Gap
Queue Length 50th (ft)	46	37			60		26	177		32	205	0
Queue Length 95th (ft)	91	87			125		#110	272		#80	#313	26
Internal Link Dist (ft)		732			1025			628			809	
Turn Bay Length (ft)							300			300		150
Base Capacity (vph)	213	494			361		187	1465		277	1479	513
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.59	0.31			0.47		0.67	0.62		0.57	0.68	0.25

Intersection Summary

Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 69.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 80	
70th %ile Actuated Cycle: 78.9	
50th %ile Actuated Cycle: 75.6	
30th %ile Actuated Cycle: 68.3	
10th %ile Actuated Cycle: 43.8	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: Fulton Ind. Blvd. & Boat Rock Blvd./Boat Rock Rd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	946	6	25	1020	31	2	0	18	41	0	2
Future Volume (vph)	16	946	6	25	1020	31	2	0	18	41	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950				0.950		0.950		
Satd. Flow (prot)	1421	3167	1615	1556	3167	1091	0	1203	1380	1026	1077	0
Flt Permitted	0.097			0.200						0.588		
Satd. Flow (perm)	145	3167	1615	328	3167	1091	0	1267	1380	635	1077	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127		208	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		849			1099			609			533	
Travel Time (s)		19.3			25.0			13.8			12.1	
Peak Hour Factor	0.93	0.93	0.93	0.72	0.72	0.72	0.83	0.83	0.83	0.84	0.84	0.84
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	27%	14%	0%	16%	14%	48%	50%	0%	17%	76%	2%	50%
Adj. Flow (vph)	20	1180	7	40	1643	50	3	0	25	57	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1180	7	40	1643	50	0	3	25	57	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	9.5	48.5	48.5	9.5	48.5	48.5	9.5	22.5	22.5	9.5	22.5	
Total Split (%)	10.6%	53.9%	53.9%	10.6%	53.9%	53.9%	10.6%	25.0%	25.0%	10.6%	25.0%	
Maximum Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	5.0	18.0	18.0	5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	54.7	54.9	54.9	54.7	54.9	54.9		5.9	5.9	9.1	9.3	
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78		0.08	0.08	0.13	0.13	
v/c Ratio	0.10	0.48	0.01	0.12	0.66	0.06		0.03	0.11	0.52	0.01	
Control Delay	4.7	7.6	0.0	4.2	11.3	0.1		33.5	1.0	44.7	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	4.7	7.6	0.0	4.2	11.3	0.1		33.5	1.0	44.7	0.0	
LOS	A	A	A	A	B	A		C	A	D	A	
Approach Delay		7.5			10.8			4.4			42.5	
Approach LOS		A			B			A			D	
90th %ile Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	0.0	6.8	6.8	5.0	16.3	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Skip	Gap	Gap	Max	Hold	
70th %ile Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	0.0	6.2	6.2	5.0	15.7	
70th %ile Term Code	Max	Hold	Hold	Max	Max	Max	Skip	Gap	Gap	Max	Hold	
50th %ile Green (s)	0.0	53.2	53.2	0.0	53.2	53.2	0.0	0.0	0.0	5.5	5.5	
50th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Hold	Hold	
30th %ile Green (s)	0.0	59.0	59.0	0.0	59.0	59.0	0.0	0.0	0.0	0.0	0.0	
30th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
10th %ile Green (s)	0.0	59.0	59.0	0.0	59.0	59.0	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	1	58	0	2	106	0		1	0	24	0	
Queue Length 95th (ft)	9	266	0	11	303	0		8	0	52	0	
Internal Link Dist (ft)		769			1019			529			453	
Turn Bay Length (ft)	300		300	300		300						
Base Capacity (vph)	204	2474	1289	343	2474	880		327	450	110	432	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.10	0.48	0.01	0.12	0.66	0.06		0.01	0.06	0.52	0.01	

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 70.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 49.9%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 78.8	
70th %ile Actuated Cycle: 78.2	
50th %ile Actuated Cycle: 67.7	
30th %ile Actuated Cycle: 63.5	
10th %ile Actuated Cycle: 63.5	

Splits and Phases: 70: Lakeview Ct. & Fulton Ind. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	888	100	67	591	230	300	363	100	85	300	185
Future Volume (vph)	139	888	100	67	591	230	300	363	100	85	300	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	350		300	350		300	300		300
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3072	4550	1417	3072	3167	1417	2334	2407	1077	2334	2407	1077
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3072	4550	1417	3072	3167	1417	2334	2407	1077	2334	2407	1077
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			205			290			143			205
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1099			761			631			649	
Travel Time (s)		25.0			17.3			14.3			14.8	
Peak Hour Factor	0.83	0.88	0.88	0.70	0.94	0.92	0.94	0.94	0.94	0.91	0.91	0.91
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	14%	14%	14%	14%	14%	14%	50%	50%	50%	50%	50%	50%
Adj. Flow (vph)	194	1171	132	111	729	290	370	448	123	108	382	236
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	1171	132	111	729	290	370	448	123	108	382	236
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

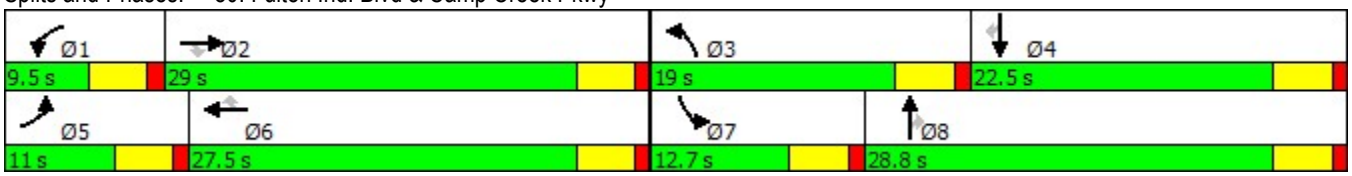
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	11.0	29.0	29.0	9.5	27.5	27.5	19.0	28.8	28.8	12.7	22.5	22.5
Total Split (%)	13.8%	36.3%	36.3%	11.9%	34.4%	34.4%	23.8%	36.0%	36.0%	15.9%	28.1%	28.1%
Maximum Green (s)	6.5	24.5	24.5	5.0	23.0	23.0	14.5	24.3	24.3	8.2	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	6.5	25.6	25.6	5.0	21.9	21.9	14.1	25.1	25.1	7.6	16.2	16.2
Actuated g/C Ratio	0.08	0.33	0.33	0.07	0.29	0.29	0.18	0.33	0.33	0.10	0.21	0.21
v/c Ratio	0.74	0.77	0.22	0.55	0.81	0.47	0.86	0.57	0.27	0.47	0.75	0.61
Control Delay	54.6	28.6	1.6	47.6	34.3	5.9	52.9	26.2	4.8	40.8	39.1	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	28.6	1.6	47.6	34.3	5.9	52.9	26.2	4.8	40.8	39.1	13.6
LOS	D	C	A	D	C	A	D	C	A	D	D	B
Approach Delay		29.6			28.3			33.9			31.1	
Approach LOS		C			C			C			C	
90th %ile Green (s)	6.5	24.5	24.5	5.0	23.0	23.0	14.5	24.3	24.3	8.2	18.0	18.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	6.5	24.5	24.5	5.0	23.0	23.0	14.5	24.3	24.3	8.2	18.0	18.0
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	6.5	24.5	24.5	5.0	23.0	23.0	14.5	24.3	24.3	8.2	18.0	18.0
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Hold	Hold	Max	Max	Max
30th %ile Green (s)	6.5	24.5	24.5	5.0	23.0	23.0	14.5	23.0	23.0	7.7	16.2	16.2
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Hold	Hold	Gap	Gap	Gap
10th %ile Green (s)	6.5	28.6	28.6	0.0	17.6	17.6	12.6	28.4	28.4	0.0	11.3	11.3
10th %ile Term Code	Max	Hold	Hold	Skip	Gap	Gap	Gap	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	50	198	0	28	176	0	93	100	0	26	93	12
Queue Length 95th (ft)	#89	245	8	41	#248	55	#170	150	29	51	142	81
Internal Link Dist (ft)		1019			681			551			569	
Turn Bay Length (ft)	300		300	350		300	350		300	300		300
Base Capacity (vph)	261	1515	608	201	953	629	443	795	451	250	567	410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.77	0.22	0.55	0.76	0.46	0.84	0.56	0.27	0.43	0.67	0.58

Intersection Summary

Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 76.8	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 30.5	Intersection LOS: C
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 80	
70th %ile Actuated Cycle: 80	
50th %ile Actuated Cycle: 80	
30th %ile Actuated Cycle: 78.2	
10th %ile Actuated Cycle: 66	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 80: Fulton Ind. Blvd & Camp Creek Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	38	16	106	184	25	94	242	1970	188	82	711	20
Future Volume (vph)	38	16	106	184	25	94	242	1970	188	82	711	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		300	300		300
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1597	1727	1262	1597	1900	1538	1612	3252	1553	1671	3085	1468
Flt Permitted	0.734			0.505			0.273			0.044		
Satd. Flow (perm)	1234	1727	1262	849	1900	1538	463	3252	1553	77	3085	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			141			109			142			109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		458			669			1465			1699	
Travel Time (s)		10.4			15.2			33.3			38.6	
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	13%	10%	28%	13%	0%	5%	12%	11%	4%	8%	17%	10%
Adj. Flow (vph)	51	21	141	257	35	131	292	2380	227	99	859	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	21	141	257	35	131	292	2380	227	99	859	24
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

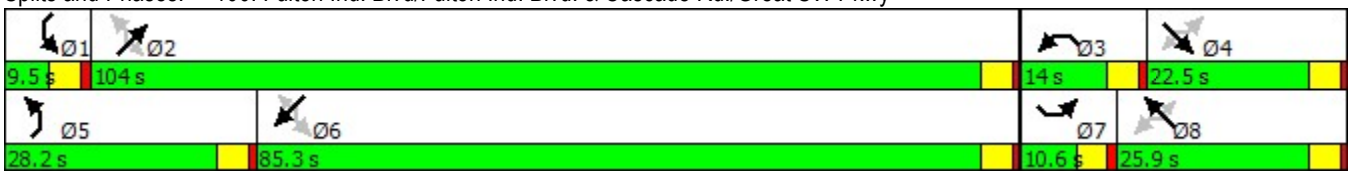
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.6	22.5	22.5	14.0	25.9	25.9	28.2	104.0	104.0	9.5	85.3	85.3
Total Split (%)	7.1%	15.0%	15.0%	9.3%	17.3%	17.3%	18.8%	69.3%	69.3%	6.3%	56.9%	56.9%
Maximum Green (s)	6.1	18.0	18.0	9.5	21.4	21.4	23.7	99.5	99.5	5.0	80.8	80.8
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	14.6	8.6	8.6	21.7	14.1	14.1	109.0	99.5	99.5	96.8	91.8	91.8
Actuated g/C Ratio	0.10	0.06	0.06	0.15	0.10	0.10	0.78	0.71	0.71	0.69	0.65	0.65
v/c Ratio	0.36	0.20	0.67	1.42	0.18	0.52	0.63	1.03	0.20	0.91	0.43	0.02
Control Delay	58.6	66.4	25.7	258.9	61.7	23.1	11.1	49.4	3.2	93.4	13.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.6	66.4	25.7	258.9	61.7	23.1	11.1	49.4	3.2	93.4	13.3	0.0
LOS	E	E	C	F	E	C	B	D	A	F	B	A
Approach Delay		37.6			169.5			42.0			21.1	
Approach LOS		D			F			D			C	
90th %ile Green (s)	6.1	15.1	15.1	9.5	18.5	18.5	18.0	99.5	99.5	5.0	86.5	86.5
90th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
70th %ile Green (s)	6.1	9.3	9.3	9.5	12.7	12.7	14.0	99.5	99.5	5.0	90.5	90.5
70th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
50th %ile Green (s)	6.1	7.1	7.1	9.5	10.5	10.5	12.1	99.5	99.5	5.0	92.4	92.4
50th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
30th %ile Green (s)	6.1	6.2	6.2	9.5	9.6	9.6	10.8	99.5	99.5	5.0	93.7	93.7
30th %ile Term Code	Max	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
10th %ile Green (s)	0.0	5.5	5.5	9.5	19.5	19.5	9.1	99.5	99.5	5.0	95.4	95.4
10th %ile Term Code	Skip	Gap	Gap	Max	Hold	Hold	Gap	Max	Max	Max	Hold	Hold
Queue Length 50th (ft)	41	19	0	~259	30	19	60	~1202	21	41	177	0
Queue Length 95th (ft)	79	45	62	#430	61	70	114	#1464	56	#176	290	0
Internal Link Dist (ft)		378			589			1385			1619	
Turn Bay Length (ft)							300		300	300		300
Base Capacity (vph)	144	221	284	181	289	326	552	2302	1140	109	2014	996
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.10	0.50	1.42	0.12	0.40	0.53	1.03	0.20	0.91	0.43	0.02

Intersection Summary

Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 140.6	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 49.2	Intersection LOS: D
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 147.1	
70th %ile Actuated Cycle: 141.3	
50th %ile Actuated Cycle: 139.1	
30th %ile Actuated Cycle: 138.2	
10th %ile Actuated Cycle: 137.5	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Fulton Ind. Blvd/Fulton Ind. Blvd. & Cascade Rd./Great SW Pkwy



Intersection	
Int Delay, s/veh	32

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	10	11	1	68	73	1301	49	121	816	39
Future Vol, veh/h	6	0	10	11	1	68	73	1301	49	121	816	39
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	88	88	88	97	97	97	80	80	80
Heavy Vehicles, %	17	0	60	18	0	29	4	12	10	9	16	28
Mvmt Flow	11	0	18	15	1	90	87	1556	59	175	1183	57

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2487	3264	592	2673	3264	778	1183	0	-	1556	0	0
Stage 1	1534	1534	-	1730	1730	-	-	-	-	-	-	-
Stage 2	953	1730	-	943	1534	-	-	-	-	-	-	-
Critical Hdwy	7.84	6.5	8.1	7.86	6.5	7.48	4.18	-	-	4.28	-	-
Critical Hdwy Stg 1	6.84	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.84	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4	3.9	3.68	4	3.59	2.24	-	-	2.29	-	-
Pot Cap-1 Maneuver	12	9	330	~ 8	9	286	575	-	0	389	-	-
Stage 1	105	180	-	77	144	-	-	-	0	-	-	-
Stage 2	251	144	-	253	180	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	~ 4	4	330	~ 4	4	286	575	-	-	389	-	-
Mov Cap-2 Maneuver	~ 4	4	-	~ 4	4	-	-	-	-	-	-	-
Stage 1	89	99	-	65	122	-	-	-	-	-	-	-
Stage 2	145	122	-	131	99	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 1620.8	$ 469.6	0.7	2.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	575	-	10	4	286	389	-	-
HCM Lane V/C Ratio	0.152	-	2.946	3.955	0.313	0.451	-	-
HCM Control Delay (s)	12.4	$	1620.8	$ 2999.3	23.2	21.6	-	-
HCM Lane LOS	B	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0.5	-	4.8	3.3	1.3	2.3	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	762	0	100	1570	0	0	9	0	0	59	0
Future Volume (vph)	100	762	0	100	1570	0	0	9	0	0	59	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		250	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt												
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1570	3139	1652	1570	3139	1652	0	2407	0	0	2407	0
Flt Permitted	0.036			0.237								
Satd. Flow (perm)	59	3139	1652	392	3139	1652	0	2407	0	0	2407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		642			731			251			574	
Travel Time (s)		14.6			16.6			5.7			13.0	
Peak Hour Factor	0.92	0.80	0.92	0.92	0.80	0.92	0.92	0.45	0.92	0.87	0.87	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	50%	50%	50%	50%	50%	50%
Adj. Flow (vph)	126	1105	0	126	2277	0	0	23	0	0	79	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	1105	0	126	2277	0	0	23	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm		NA			NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	13.0	113.1	113.1	14.4	114.5	114.5	22.5	22.5		22.5	22.5	
Total Split (%)	8.7%	75.4%	75.4%	9.6%	76.3%	76.3%	15.0%	15.0%		15.0%	15.0%	
Maximum Green (s)	8.5	108.6	108.6	9.9	110.0	110.0	18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	
Act Effct Green (s)	119.8	111.3		117.2	110.0			10.0			10.0	
Actuated g/C Ratio	0.84	0.78		0.83	0.77			0.07			0.07	
v/c Ratio	0.90	0.45		0.33	0.94			0.14			0.47	
Control Delay	90.7	6.0		4.0	22.7			63.3			72.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	90.7	6.0		4.0	22.7			63.3			72.4	
LOS	F	A		A	C			E			E	
Approach Delay		14.7			21.8			63.3			72.4	
Approach LOS		B			C			E			E	
90th %ile Green (s)	8.5	109.9	109.9	8.6	110.0	110.0	13.4	13.4		13.4	13.4	
90th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
70th %ile Green (s)	8.5	110.8	110.8	7.7	110.0	110.0	11.4	11.4		11.4	11.4	
70th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
50th %ile Green (s)	8.5	111.4	111.4	7.1	110.0	110.0	10.0	10.0		10.0	10.0	
50th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.5	111.9	111.9	6.6	110.0	110.0	8.7	8.7		8.7	8.7	
30th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
10th %ile Green (s)	8.5	112.5	112.5	6.0	110.0	110.0	6.7	6.7		6.7	6.7	
10th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	72	153		12	789			10			37	
Queue Length 95th (ft)	#208	183		26	717			13			64	
Internal Link Dist (ft)		562			651			171			494	
Turn Bay Length (ft)	300			300								
Base Capacity (vph)	140	2460		413	2431			305			305	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.90	0.45		0.31	0.94			0.08			0.26	

Intersection Summary

Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 142	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 145.4	
70th %ile Actuated Cycle: 143.4	
50th %ile Actuated Cycle: 142	
30th %ile Actuated Cycle: 140.7	
10th %ile Actuated Cycle: 138.7	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 130: Great SW Pkwy

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	24	1236	72	47	1181
Future Volume (vph)	69	24	1236	72	47	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	300	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.965			0.850		
Flt Protected	0.964				0.950	
Satd. Flow (prot)	1544	0	3112	1524	1570	3112
Flt Permitted	0.964				0.098	
Satd. Flow (perm)	1544	0	3112	1524	162	3112
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	22			87		
Link Speed (mph)	30		30			30
Link Distance (ft)	676		615			670
Travel Time (s)	15.4		14.0			15.2
Peak Hour Factor	0.75	0.75	0.96	0.96	0.70	0.70
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	13%	16%	6%	15%	16%
Adj. Flow (vph)	107	37	1494	87	78	1957
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	0	1494	87	78	1957
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA	Perm	pm+pt	NA

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Protected Phases	8		2		1	6
Permitted Phases				2	6	
Detector Phase	8		2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5
Total Split (s)	22.5		43.0	43.0	9.5	52.5
Total Split (%)	30.0%		57.3%	57.3%	12.7%	70.0%
Maximum Green (s)	18.0		38.5	38.5	5.0	48.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	None	Min
Walk Time (s)	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0		0	0		0
Act Effct Green (s)	10.6		43.4	43.4	49.7	50.8
Actuated g/C Ratio	0.16		0.65	0.65	0.74	0.76
v/c Ratio	0.55		0.74	0.09	0.35	0.83
Control Delay	30.0		15.4	2.4	8.0	13.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	30.0		15.4	2.4	8.0	13.0
LOS	C		B	A	A	B
Approach Delay	30.0		14.7			12.8
Approach LOS	C		B			B
90th %ile Green (s)	16.0		38.5	38.5	5.0	48.0
90th %ile Term Code	Gap		Max	Max	Max	Max
70th %ile Green (s)	12.7		38.5	38.5	5.0	48.0
70th %ile Term Code	Gap		Max	Max	Max	Max
50th %ile Green (s)	10.6		38.5	38.5	5.0	48.0
50th %ile Term Code	Gap		Max	Max	Max	Max
30th %ile Green (s)	8.7		39.0	39.0	5.0	48.5
30th %ile Term Code	Gap		Dwell	Dwell	Max	Dwell
10th %ile Green (s)	0.0		54.0	54.0	0.0	54.0
10th %ile Term Code	Skip		Dwell	Dwell	Skip	Dwell
Queue Length 50th (ft)	47		242	0	8	262
Queue Length 95th (ft)	77		#467	19	18	270
Internal Link Dist (ft)	596		535			590
Turn Bay Length (ft)				300	300	
Base Capacity (vph)	433		2015	1017	225	2358
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.33		0.74	0.09	0.35	0.83

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 67			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 73			
70th %ile Actuated Cycle: 69.7			
50th %ile Actuated Cycle: 67.6			
30th %ile Actuated Cycle: 66.2			
10th %ile Actuated Cycle: 58.5			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 140: Bakers Ferry Rd.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	35	7	7	13	7	26	29	1073	20	66	1329	152
Future Volume (vph)	35	7	7	13	7	26	29	1073	20	66	1329	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.925			0.924			0.997			0.985	
Flt Protected	0.950				0.986		0.950			0.950		
Satd. Flow (prot)	1399	1643	0	0	1324	0	1687	4536	0	1467	4583	0
Flt Permitted	0.926				0.897		0.950			0.950		
Satd. Flow (perm)	1364	1643	0	0	1205	0	1687	4536	0	1467	4583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			40			4			38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		409			537			753			584	
Travel Time (s)		9.3			12.2			17.1			13.3	
Peak Hour Factor	0.71	0.71	0.71	0.76	0.76	0.76	0.97	0.97	0.97	0.68	0.68	0.68
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	29%	0%	14%	31%	0%	39%	7%	14%	15%	23%	12%	7%
Adj. Flow (vph)	57	11	11	20	11	40	35	1283	24	113	2267	259
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	22	0	0	71	0	35	1307	0	113	2526	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		9.6	35.4		17.0	42.8	
Total Split (%)	30.1%	30.1%		30.1%	30.1%		12.8%	47.2%		22.7%	57.1%	
Maximum Green (s)	18.1	18.1		18.1	18.1		5.1	30.9		12.5	38.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	8.5	8.5			8.2		5.2	35.7		9.6	45.6	
Actuated g/C Ratio	0.14	0.14			0.14		0.09	0.60		0.16	0.77	
v/c Ratio	0.29	0.09			0.35		0.24	0.48		0.48	0.72	
Control Delay	28.2	18.5			19.3		33.0	11.1		30.9	11.0	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	28.2	18.5			19.3		33.0	11.1		30.9	11.0	
LOS	C	B			B		C	B		C	B	
Approach Delay		25.5			19.3			11.7			11.8	
Approach LOS		C			B			B			B	
90th %ile Green (s)	12.5	12.5		12.5	12.5		5.1	30.9		12.5	38.3	
90th %ile Term Code	Gap	Gap		Hold	Hold		Max	Max		Max	Max	
70th %ile Green (s)	10.1	10.1		10.1	10.1		5.1	31.4		12.0	38.3	
70th %ile Term Code	Gap	Gap		Hold	Hold		Max	Hold		Gap	Max	
50th %ile Green (s)	8.4	8.4		8.4	8.4		0.0	27.7		10.1	42.3	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Gap		Gap	Hold	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	26.9		7.6	39.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Gap	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	53.3		0.0	53.3	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	19	4			10		12	121		37	160	
Queue Length 95th (ft)	40	16			34		41	196		65	247	
Internal Link Dist (ft)		329			457			673			504	
Turn Bay Length (ft)							300			300		
Base Capacity (vph)	426	521			404		148	2851		316	3521	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.13	0.04			0.18		0.24	0.46		0.36	0.72	

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 59.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 69.4			
70th %ile Actuated Cycle: 67			
50th %ile Actuated Cycle: 59.7			
30th %ile Actuated Cycle: 43.5			
10th %ile Actuated Cycle: 57.8			

Splits and Phases: 150: Mendel Dr./Wharton Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	0	7	4	0	14	15	1225	11	9	1415	58
Future Volume (vph)	20	0	7	4	0	14	15	1225	11	9	1415	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	250		250	200		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.966			0.928				0.850		0.994	
Flt Protected		0.964			0.977		0.950			0.950		
Satd. Flow (prot)	0	1413	0	0	1273	0	1687	4550	1404	1467	4612	0
Flt Permitted		0.800			0.864		0.950			0.950		
Satd. Flow (perm)	0	1173	0	0	1126	0	1687	4550	1404	1467	4612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			44				44		10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		720			447			1232			950	
Travel Time (s)		16.4			10.2			28.0			21.6	
Peak Hour Factor	0.57	0.57	0.57	0.25	0.75	0.75	0.91	0.91	0.91	0.73	0.73	0.73
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	29%	0%	14%	31%	0%	39%	7%	14%	15%	23%	12%	7%
Adj. Flow (vph)	41	0	14	19	0	22	19	1562	14	14	2248	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	41	0	19	1562	14	14	2340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8					2			
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	113.0	113.0	12.0	113.0	
Total Split (%)	16.7%	16.7%		16.7%	16.7%		8.0%	75.3%	75.3%	8.0%	75.3%	
Maximum Green (s)	20.5	20.5		20.5	20.5		7.5	108.5	108.5	7.5	108.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	Min	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)		8.1			8.1		7.3	123.3	123.3	7.1	128.2	
Actuated g/C Ratio		0.05			0.05		0.05	0.82	0.82	0.05	0.85	
v/c Ratio		0.53			0.40		0.23	0.42	0.01	0.20	0.59	
Control Delay		41.8			27.4		74.9	4.5	0.0	77.7	7.2	
Queue Delay		0.1			0.0		0.0	0.1	0.0	0.0	0.3	
Total Delay		41.9			27.4		74.9	4.6	0.0	77.7	7.4	
LOS		D			C		E	A	A	E	A	
Approach Delay		41.9			27.4			5.4			7.9	
Approach LOS		D			C			A			A	
90th %ile Green (s)	13.1	13.1		13.1	13.1		9.5	114.2	114.2	9.2	113.9	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
70th %ile Green (s)	9.4	9.4		9.4	9.4		8.1	119.2	119.2	7.9	119.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	6.9	6.9		6.9	6.9		7.1	122.7	122.7	6.9	122.5	
50th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
30th %ile Green (s)	5.5	5.5		5.5	5.5		0.0	125.1	125.1	5.9	135.5	
30th %ile Term Code	Gap	Gap		Gap	Gap		Skip	Coord	Coord	Gap	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	135.5	135.5	5.5	145.5	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord	Coord	Gap	Coord	
Queue Length 50th (ft)		11			0		18	128	0	15	160	
Queue Length 95th (ft)		20			24		47	204	0	m11	m0	
Internal Link Dist (ft)		640			367			1152			870	
Turn Bay Length (ft)							250		250	200		
Base Capacity (vph)		198			191		90	3741	1162	77	3942	
Starvation Cap Reductn		0			0		0	0	0	0	758	
Spillback Cap Reductn		6			0		0	681	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.29			0.21		0.21	0.51	0.01	0.18	0.73	

Intersection Summary

Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 58 (39%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 45.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 160: Marvin Miller Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Future Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt												
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1863	0	1770	5085	0	1770	5085	1863
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	1863	0	0	1863	0	1770	5085	0	1770	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.85	0.85	0.85	0.92	0.88	0.92	0.47	0.88	0.92	0.53	0.73	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	0	70	0	0	695	0	432	3206	0	37	2617	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	695	0	432	3206	0	37	2617	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA			NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8								6
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	50.0	50.0		50.0	50.0		33.0	90.5		9.5	67.0	67.0
Total Split (%)	33.3%	33.3%		33.3%	33.3%		22.0%	60.3%		6.3%	44.7%	44.7%
Maximum Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		45.5			45.5		28.5	87.9		5.0	62.5	
Actuated g/C Ratio		0.30			0.30		0.19	0.59		0.03	0.42	
v/c Ratio		0.12			1.23		1.29	1.08		0.63	1.24	
Control Delay		38.7			162.0		198.8	70.5		112.2	148.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		38.7			162.0		198.8	70.5		112.2	148.2	
LOS		D			F		F	E		F	F	
Approach Delay		38.7			162.0			85.7			147.7	
Approach LOS		D			F			F			F	
90th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
90th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
70th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
70th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
50th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
50th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
30th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
30th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
10th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	95.5		0.0	62.5	62.5
10th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Skip	Coord	Coord
Queue Length 50th (ft)		50			~837		~544	~1302		36	~1157	
Queue Length 95th (ft)		85			#1046		279	#1315		46	#855	
Internal Link Dist (ft)		669			848			870			895	
Turn Bay Length (ft)							200			300		
Base Capacity (vph)		565			565		336	2979		59	2118	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.12			1.23		1.29	1.08		0.63	1.24	

Intersection Summary

Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 58 (39%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 116.1	Intersection LOS: F
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 170: Patton Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	9	1311	4	84	1648	2	12	0	4	12	0	21
Future Volume (vph)	9	1311	4	84	1648	2	12	0	4	12	0	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.966			0.913	
Flt Protected	0.950			0.950				0.964			0.982	
Satd. Flow (prot)	1504	4427	0	902	5684	0	0	1594	0	0	939	0
Flt Permitted	0.950			0.950				0.789			0.872	
Satd. Flow (perm)	1504	4427	0	902	5684	0	0	1305	0	0	834	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								95			95	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			245			480			470	
Travel Time (s)		17.3			5.6			10.9			10.7	
Peak Hour Factor	0.95	0.95	0.95	0.79	0.79	0.79	0.77	0.77	0.77	0.72	0.72	0.72
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	20%	17%	73%	100%	15%	9%	5%	0%	29%	100%	0%	71%
Adj. Flow (vph)	11	1601	5	123	2420	3	18	0	6	19	0	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1606	0	123	2423	0	0	24	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4			8		
Detector Phase	5	2		1	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.5	62.0		35.0	87.5		23.0	23.0		23.0	23.0	
Total Split (%)	7.9%	51.7%		29.2%	72.9%		19.2%	19.2%		19.2%	19.2%	
Maximum Green (s)	5.0	57.5		30.5	83.0		18.5	18.5		18.5	18.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.5	81.2		21.5	105.6			5.8			5.8	
Actuated g/C Ratio	0.05	0.68		0.18	0.88			0.05			0.05	
v/c Ratio	0.14	0.54		0.76	0.48			0.16			0.41	
Control Delay	57.2	12.3		77.3	2.6			2.2			11.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	57.2	12.3		77.3	2.6			2.2			11.1	
LOS	E	B		E	A			A			B	
Approach Delay		12.6			6.2			2.2			11.1	
Approach LOS		B			A			A			B	
90th %ile Green (s)	8.1	68.2		31.5	91.6		6.8	6.8		6.8	6.8	
90th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	0.0	75.2		25.8	105.5		5.5	5.5		5.5	5.5	
70th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	0.0	79.4		21.6	105.5		5.5	5.5		5.5	5.5	
50th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
30th %ile Green (s)	0.0	83.6		17.4	105.5		5.5	5.5		5.5	5.5	
30th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	99.7		11.3	115.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	8	221		99	122			0			0	
Queue Length 95th (ft)	28	343		146	93			0			0	
Internal Link Dist (ft)		680			165			400			390	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	81	2996		230	5003			281			208	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.14	0.54		0.53	0.48			0.09			0.25	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 180: Commerce Cir.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1372	1717	33	0	17
Future Volume (vph)	0	1372	1717	33	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	0.86	0.86	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	6408	6389	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	6408	6389	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		245	541		662	
Travel Time (s)		5.6	12.3		15.0	
Peak Hour Factor	0.96	0.96	0.78	0.78	0.53	0.53
Growth Factor	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	0	1658	2553	49	0	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1658	2602	0	0	37
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1337	14	72	1704	1	15	0	52	1	0	0
Future Volume (vph)	6	1337	14	72	1704	1	15	0	52	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.86	0.86	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.895				
Flt Protected	0.950			0.950				0.989			0.950	
Satd. Flow (prot)	1770	6395	0	1770	6408	0	0	1649	0	0	1770	0
Flt Permitted	0.950			0.950				0.923			0.588	
Satd. Flow (perm)	1770	6395	0	1770	6408	0	0	1539	0	0	1095	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						95				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		541			537			437			323	
Travel Time (s)		12.3			12.2			9.9			7.3	
Peak Hour Factor	0.99	0.99	0.99	0.78	0.78	0.78	0.86	0.86	0.86	0.50	0.50	0.50
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	7	1567	16	107	2534	1	20	0	70	2	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1583	0	107	2535	0	0	90	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	11.0	69.0		25.0	83.0		26.0	26.0		26.0	26.0	
Total Split (%)	9.2%	57.5%		20.8%	69.2%		21.7%	21.7%		21.7%	21.7%	
Maximum Green (s)	6.5	64.5		20.5	78.5		21.5	21.5		21.5	21.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	C-Max		Min	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.1	87.1		12.6	93.6			6.8			6.8	
Actuated g/C Ratio	0.05	0.73		0.10	0.78			0.06			0.06	
v/c Ratio	0.08	0.34		0.58	0.51			0.51			0.03	
Control Delay	50.9	3.7		67.9	2.3			19.9			53.0	
Queue Delay	0.0	0.0		0.0	0.1			0.0			0.0	
Total Delay	50.9	3.7		67.9	2.4			19.9			53.0	
LOS	D	A		E	A			B			D	
Approach Delay		3.9			5.1			19.9			53.0	
Approach LOS		A			A			B			D	
90th %ile Green (s)	7.2	78.7		17.4	88.9		10.4	10.4		10.4	10.4	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	6.4	84.7		14.6	92.9		7.2	7.2		7.2	7.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	5.9	88.3		12.6	95.0		5.6	5.6		5.6	5.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Hold	Hold	
30th %ile Green (s)	5.5	90.4		10.6	95.5		5.5	5.5		5.5	5.5	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	5.5	93.3		7.7	95.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	6	15		83	56			0			2	
Queue Length 95th (ft)	m11	59		m107	m86			42			6	
Internal Link Dist (ft)		461			457			357			243	
Turn Bay Length (ft)	300			150								
Base Capacity (vph)	97	4641		302	4996			353			196	
Starvation Cap Reductn	0	0		0	744			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.07	0.34		0.35	0.60			0.25			0.01	

Intersection Summary

Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 111 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: Shirley Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	326	0	373	0	0	0	0	792	1211	579	1548	0
Future Volume (vph)	326	0	373	0	0	0	0	792	1211	579	1548	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	225		0	0		0
Storage Lanes	2		1	0		0	0		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.88	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	3242	0	1524	0	0	0	0	5836	2538	1719	4631	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3242	0	1524	0	0	0	0	5836	2538	1719	4631	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55						838			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		758			734			537			524	
Travel Time (s)		17.2			16.7			12.2			11.9	
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.97	0.97	0.97	0.94	0.94	0.94
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	8%	2%	6%	2%	2%	2%	12%	12%	12%	5%	12%	2%
Adj. Flow (vph)	430	0	492	0	0	0	0	947	1448	715	1910	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	430	0	492	0	0	0	0	947	1448	715	1910	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1		1					2	1	1	2	
Detector Template	Left		Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20		20					100	20	20	100	
Trailing Detector (ft)	0		0					0	0	0	0	
Detector 1 Position(ft)	0		0					0	0	0	0	
Detector 1 Size(ft)	20		20					6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot		Perm					NA	Perm	Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7							2		1	6	
Permitted Phases			7						2			
Detector Phase	7		7					2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5		9.5					22.5	22.5	9.5	22.5	
Total Split (s)	32.0		32.0					42.0	42.0	46.0	88.0	
Total Split (%)	26.7%		26.7%					35.0%	35.0%	38.3%	73.3%	
Maximum Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
Yellow Time (s)	3.5		3.5					3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5					4.5	4.5	4.5	4.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Recall Mode	None		None					C-Min	C-Min	None	C-Min	
Walk Time (s)								7.0	7.0		7.0	
Flash Dont Walk (s)								11.0	11.0		11.0	
Pedestrian Calls (#/hr)								0	0		0	
Act Effct Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
Actuated g/C Ratio	0.23		0.23					0.31	0.31	0.35	0.70	
v/c Ratio	0.58		1.26					0.52	1.06	1.20	0.59	
Control Delay	44.8		170.4					26.6	54.5	138.8	7.9	
Queue Delay	0.0		0.0					0.0	17.3	0.3	0.4	
Total Delay	44.8		170.4					26.6	71.9	139.1	8.4	
LOS	D		F					C	E	F	A	
Approach Delay		111.8						53.9			44.0	
Approach LOS		F						D			D	
90th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
90th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
70th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
70th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
50th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
50th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
30th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
30th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
10th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
10th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
Queue Length 50th (ft)	153		~445					174	~426	~665	279	
Queue Length 95th (ft)	202		#637					136	#622	#905	209	
Internal Link Dist (ft)		678			654			457			444	
Turn Bay Length (ft)												
Base Capacity (vph)	742		391					1823	1369	594	3222	
Starvation Cap Reductn	0		0					0	72	25	717	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.58		1.26					0.52	1.12	1.26	0.76	

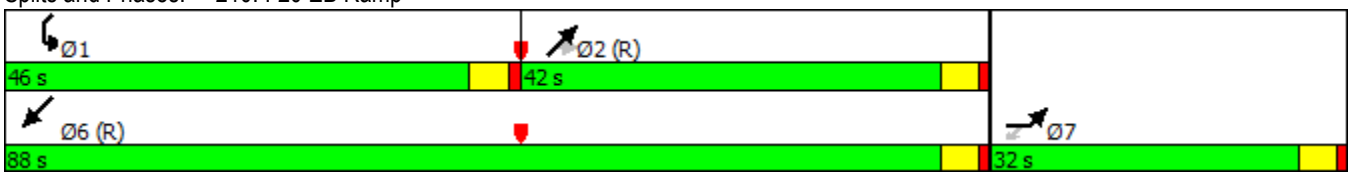
Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 13 (11%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay: 58.5		Intersection LOS: E	
Intersection Capacity Utilization 108.4%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 210: I-20 EB Ramp



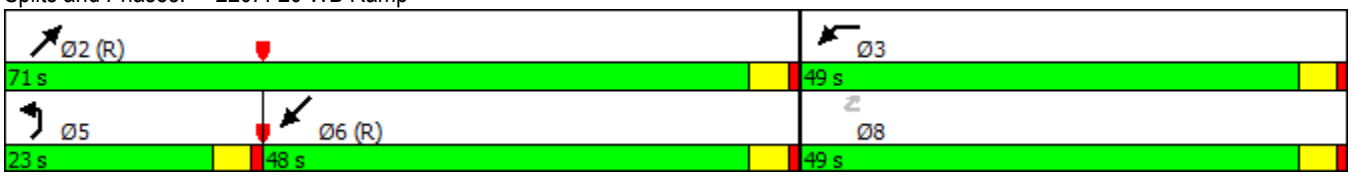
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1000	0	326	104	964	0	0	1158	192
Future Volume (vph)	0	0	0	1000	0	326	104	964	0	0	1158	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		400	0		0	0		0
Storage Lanes	0		0	3		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.91	1.00	1.00	0.86	0.86
Frt						0.850					0.979	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	4545	0	1524	1517	4715	0	0	5972	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	4545	0	1524	1517	4715	0	0	5972	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						58					39	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			795			524			744	
Travel Time (s)		11.1			18.1			11.9			16.9	
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.92	0.92	0.92	0.90	0.90	0.90
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	12%	2%	6%	19%	10%	2%	16%	8%	2%
Adj. Flow (vph)	0	0	0	1275	0	416	131	1215	0	0	1493	247
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	1275	0	416	131	1215	0	0	1740	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1		1	1	2			2	
Detector Template				Left		Right	Left	Thru			Thru	
Leading Detector (ft)				20		20	20	100			100	
Trailing Detector (ft)				0		0	0	0			0	
Detector 1 Position(ft)				0		0	0	0			0	
Detector 1 Size(ft)				20		20	20	6			6	
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0		0.0	0.0	0.0			0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type				Prot		Perm	Prot	NA			NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases				3			5	2			6	
Permitted Phases						8						
Detector Phase				3		8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0		5.0	5.0	5.0			5.0	
Minimum Split (s)				9.5		22.5	9.5	22.5			22.5	
Total Split (s)				49.0		49.0	23.0	71.0			48.0	
Total Split (%)				40.8%		40.8%	19.2%	59.2%			40.0%	
Maximum Green (s)				44.5		44.5	18.5	66.5			43.5	
Yellow Time (s)				3.5		3.5	3.5	3.5			3.5	
All-Red Time (s)				1.0		1.0	1.0	1.0			1.0	
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	
Total Lost Time (s)				4.5		4.5	4.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	
Recall Mode				None		None	None	C-Min			C-Min	
Walk Time (s)						7.0		7.0			7.0	
Flash Dont Walk (s)						11.0		11.0			11.0	
Pedestrian Calls (#/hr)						0		0			0	
Act Effct Green (s)				40.2		40.2	14.9	70.8			51.4	
Actuated g/C Ratio				0.34		0.34	0.12	0.59			0.43	
v/c Ratio				0.84		0.76	0.70	0.44			0.67	
Control Delay				42.3		39.7	58.0	6.7			25.8	
Queue Delay				0.0		0.0	0.0	0.2			0.4	
Total Delay				42.3		39.7	58.0	6.9			26.3	
LOS				D		D	E	A			C	
Approach Delay					41.7			11.9			26.3	
Approach LOS					D			B			C	
90th %ile Green (s)				44.5		44.5	18.5	66.5			43.5	
90th %ile Term Code				Max		Max	Max	Coord			Coord	
70th %ile Green (s)				43.3		43.3	18.1	67.7			45.1	
70th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
50th %ile Green (s)				41.0		41.0	15.6	70.0			49.9	
50th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
30th %ile Green (s)				38.0		38.0	13.0	73.0			55.5	
30th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
10th %ile Green (s)				34.3		34.3	9.4	76.7			62.8	
10th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
Queue Length 50th (ft)				318		247	94	224			259	
Queue Length 95th (ft)				359		357	158	252			330	
Internal Link Dist (ft)		407			715			444			664	
Turn Bay Length (ft)						400						
Base Capacity (vph)				1685		601	233	2781			2578	
Starvation Cap Reductn				0		0	0	740			0	
Spillback Cap Reductn				6		0	0	0			359	
Storage Cap Reductn				0		0	0	0			0	
Reduced v/c Ratio				0.76		0.69	0.56	0.60			0.78	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 62 (52%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 108.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 220: I-20 WB Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	76	934	110	22	736	25	10	3	24	68	6	12
Future Volume (vph)	76	934	110	22	736	25	10	3	24	68	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.995			0.911			0.981	
Flt Protected	0.950			0.950				0.987			0.962	
Satd. Flow (prot)	1597	4658	0	1805	4614	0	0	1564	0	0	1572	0
Flt Permitted	0.273			0.187				0.914			0.733	
Satd. Flow (perm)	459	4658	0	355	4614	0	0	1448	0	0	1198	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			13			44			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		744			1498			395			449	
Travel Time (s)		16.9			34.0			9.0			10.2	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.64	0.64	0.64	0.89	0.89	0.89
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	13%	10%	6%	0%	12%	8%	2%	2%	13%	16%	17%	2%
Adj. Flow (vph)	96	1178	139	29	970	33	18	5	44	89	8	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	1317	0	29	1003	0	0	67	0	0	113	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	37.5	37.5		37.5	37.5		22.5	22.5		22.5	22.5	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Maximum Green (s)	33.0	33.0		33.0	33.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	43.7	43.7		43.7	43.7			10.2			10.2	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.17			0.17	
v/c Ratio	0.29	0.39		0.11	0.30			0.24			0.53	
Control Delay	5.5	3.3		6.0	5.0			11.9			27.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.5	3.3		6.0	5.0			11.9			27.9	
LOS	A	A		A	A			B			C	
Approach Delay		3.4			5.1			11.9			27.9	
Approach LOS		A			A			B			C	
90th %ile Green (s)	35.8	35.8		35.8	35.8		15.2	15.2		15.2	15.2	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	38.8	38.8		38.8	38.8		12.2	12.2		12.2	12.2	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	40.8	40.8		40.8	40.8		10.2	10.2		10.2	10.2	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	42.9	42.9		42.9	42.9		8.1	8.1		8.1	8.1	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	55.5	55.5		55.5	55.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	2	5		3	63			7			33	
Queue Length 95th (ft)	m56	118		m6	m78			18			68	
Internal Link Dist (ft)		664			1418			315			369	
Turn Bay Length (ft)	150			200								
Base Capacity (vph)	334	3404		258	3361			465			369	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.29	0.39		0.11	0.30			0.14			0.31	

Intersection Summary

Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 5 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 5.3		Intersection LOS: A	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 230: Wendell Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Future Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	3034	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	3034	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			335			177			177			177
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.91	0.91	0.91	0.81	0.81	0.81	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	7%	3%	4%	10%	2%	5%	5%	12%	11%	14%	19%	5%
Adj. Flow (vph)	424	1080	1059	170	369	29	435	880	192	42	468	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	424	1080	1059	170	369	29	435	880	192	42	468	92
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	27.6	63.0	63.0	11.0	46.4	46.4	20.3	36.5	36.5	9.5	25.7	25.7
Total Split (%)	23.0%	52.5%	52.5%	9.2%	38.7%	38.7%	16.9%	30.4%	30.4%	7.9%	21.4%	21.4%
Maximum Green (s)	23.1	58.5	58.5	6.5	41.9	41.9	15.8	32.0	32.0	5.0	21.2	21.2
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	20.1	58.5	58.5	6.5	44.9	44.9	15.8	33.9	33.9	5.0	21.2	21.2
Actuated g/C Ratio	0.17	0.49	0.49	0.05	0.37	0.37	0.13	0.28	0.28	0.04	0.18	0.18
v/c Ratio	0.77	0.63	1.14	0.99	0.28	0.04	0.99	0.97	0.36	0.33	0.87	0.22
Control Delay	57.7	24.9	98.2	122.6	27.5	0.1	88.2	52.7	3.8	54.7	64.6	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	24.9	98.2	122.6	27.5	0.1	88.2	52.7	3.8	54.7	64.6	9.6
LOS	E	C	F	F	C	A	F	D	A	D	E	A
Approach Delay		60.6			54.6			56.7			55.5	
Approach LOS		E			D			E			E	
90th %ile Green (s)	23.1	58.5	58.5	6.5	41.9	41.9	15.8	32.0	32.0	5.0	21.2	21.2
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	22.7	58.5	58.5	6.5	42.3	42.3	15.8	32.0	32.0	5.0	21.2	21.2
70th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	20.7	58.5	58.5	6.5	44.3	44.3	15.8	32.0	32.0	5.0	21.2	21.2
50th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	18.6	58.5	58.5	6.5	46.4	46.4	15.8	32.0	32.0	5.0	21.2	21.2
30th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	15.5	58.5	58.5	6.5	49.5	49.5	15.8	41.5	41.5	0.0	21.2	21.2
10th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
Queue Length 50th (ft)	162	316	~819	69	105	0	140	~380	15	17	202	13
Queue Length 95th (ft)	214	388	#1078	#121	132	0	#274	#514	15	36	#281	22
Internal Link Dist (ft)		1021			1100			1418			1649	
Turn Bay Length (ft)				250		400	350			300		
Base Capacity (vph)	630	1708	928	172	1323	686	439	910	537	128	536	417
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.63	1.14	0.99	0.28	0.04	0.99	0.97	0.36	0.33	0.87	0.22

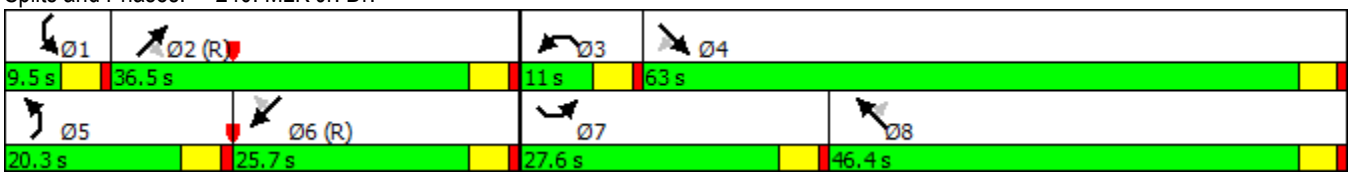
Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay: 58.3		Intersection LOS: E	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 240: MLK Jr. Dr.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	4	21	45	20	63	1064	20	8	332	20
Future Volume (vph)	4	4	4	21	45	20	63	1064	20	8	332	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	150		250
Storage Lanes	0		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.954				0.850			0.850
Flt Protected		0.976		0.950			0.950			0.950		
Satd. Flow (prot)	0	1818	1583	1770	1777	0	1770	3008	1583	1770	3008	1583
Flt Permitted		0.895		0.624			0.423			0.108		
Satd. Flow (perm)	0	1667	1583	1162	1777	0	788	3008	1583	201	3008	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			95		18				95			95
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		617			886			1729			1350	
Travel Time (s)		14.0			20.1			39.3			30.7	
Peak Hour Factor	0.50	0.50	0.50	0.66	0.94	0.94	0.79	0.84	0.84	0.50	0.81	0.81
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	20%	2%	2%	20%	2%
Adj. Flow (vph)	9	9	9	37	56	25	93	1469	28	19	475	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	18	9	37	81	0	93	1469	28	19	475	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8
Detector Phase	6	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.4	23.4	23.4	9.6	33.0		9.8	77.5	77.5	9.5	77.2	77.2
Total Split (%)	19.5%	19.5%	19.5%	8.0%	27.5%		8.2%	64.6%	64.6%	7.9%	64.3%	64.3%
Maximum Green (s)	18.9	18.9	18.9	5.1	28.5		5.3	73.0	73.0	5.0	72.7	72.7
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0			0	0		0	0
Act Effct Green (s)		27.7	27.7	34.8	34.8		75.3	72.0	72.0	70.0	64.1	64.1
Actuated g/C Ratio		0.23	0.23	0.29	0.29		0.63	0.60	0.60	0.58	0.53	0.53
v/c Ratio		0.05	0.02	0.10	0.15		0.17	0.81	0.03	0.10	0.30	0.03
Control Delay		47.0	0.0	37.6	29.8		1.9	8.2	0.0	6.8	15.2	0.1
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		47.0	0.0	37.6	29.8		1.9	8.2	0.0	6.8	15.2	0.1
LOS		D	A	D	C		A	A	A	A	B	A
Approach Delay		31.3			32.3			7.7			14.1	
Approach LOS		C			C			A			B	
90th %ile Green (s)	8.9	8.9	8.9	6.2	19.6		8.3	80.7	80.7	6.2	78.6	78.6
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Gap	Gap	Gap	Gap	Hold	Hold
70th %ile Green (s)	14.7	14.7	14.7	8.4	27.6		8.1	72.8	72.8	6.1	70.8	70.8
70th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	26.7	26.7	26.7	7.2	38.4		8.1	72.6	72.6	0.0	60.0	60.0
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Skip	Hold	Hold
30th %ile Green (s)	40.9	40.9	40.9	0.0	40.9		7.4	70.1	70.1	0.0	58.2	58.2
30th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Gap	Gap	Gap	Skip	Hold	Hold
10th %ile Green (s)	47.3	47.3	47.3	0.0	47.3		6.3	63.7	63.7	0.0	52.9	52.9
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Gap	Gap	Gap	Skip	Hold	Hold
Queue Length 50th (ft)		11	0	20	34		5	47	0	6	111	0
Queue Length 95th (ft)		21	0	41	91		m3	m47	m0	5	85	0
Internal Link Dist (ft)		537			806			1649			1270	
Turn Bay Length (ft)							150			150		250
Base Capacity (vph)		424	473	370	556		556	1868	1019	194	1852	1011
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.02	0.10	0.15		0.17	0.79	0.03	0.10	0.26	0.03

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 250: Old Gordon Rd.

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	102	102	200	800	350	0
Future Volume (vph)	102	102	200	800	350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950		0.950			
Satd. Flow (prot)	902	808	950	3008	3008	1863
Flt Permitted	0.950		0.408			
Satd. Flow (perm)	902	808	408	3008	3008	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		129				
Link Speed (mph)	30			30	30	
Link Distance (ft)	912			1889	1254	
Travel Time (s)	20.7			42.9	28.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	100%	100%	90%	20%	20%	2%
Adj. Flow (vph)	129	129	252	1009	441	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	129	129	252	1009	441	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	26.0	51.0	25.0	25.0
Total Split (%)	32.0%	32.0%	34.7%	68.0%	33.3%	33.3%
Maximum Green (s)	19.5	19.5	21.5	46.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	15.0	15.0	51.0	51.0	31.6	
Actuated g/C Ratio	0.20	0.20	0.68	0.68	0.42	
v/c Ratio	0.72	0.49	0.65	0.49	0.35	
Control Delay	49.2	11.5	14.4	7.4	18.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	49.2	11.5	14.4	7.4	18.4	
LOS	D	B	B	A	B	
Approach Delay	30.4			8.8	18.4	
Approach LOS	C			A	B	
90th %ile Green (s)	19.5	19.5	21.5	46.5	20.5	20.5
90th %ile Term Code	Max	Max	Max	Coord	Coord	Coord
70th %ile Green (s)	19.1	19.1	19.3	46.9	23.1	23.1
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	15.9	15.9	14.7	50.1	30.9	30.9
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	12.6	12.6	11.2	53.4	37.7	37.7
30th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
10th %ile Green (s)	7.7	7.7	7.9	58.3	45.9	45.9
10th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
Queue Length 50th (ft)	56	0	45	104	72	
Queue Length 95th (ft)	108	42	103	172	136	
Internal Link Dist (ft)	832			1809	1174	
Turn Bay Length (ft)						
Base Capacity (vph)	234	305	432	2047	1268	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.55	0.42	0.58	0.49	0.35	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	

Actuated Cycle Length: 75	
Offset: 64 (85%), Referenced to phase 2:NETL and 6:SWT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 41.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 270: Fulton Ind. Blvd & UPS Drive

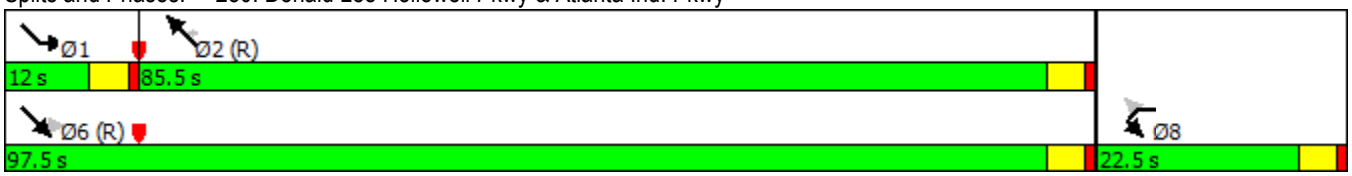
Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	45	0	99	1533	741	0
Future Volume (vph)	45	0	99	1533	741	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300			0
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1863	1570	3139	3139	1652
Flt Permitted	0.950		0.270			
Satd. Flow (perm)	1770	1863	446	3139	3139	1652
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1300			1130	416	
Travel Time (s)	29.5			25.7	9.5	
Peak Hour Factor	0.72	0.72	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	15%	15%	15%	15%
Adj. Flow (vph)	73	0	125	1933	934	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	125	1933	934	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm

Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Protected Phases	8		1	6	2	
Permitted Phases		8	6			2
Detector Phase	8	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	12.0	97.5	85.5	85.5
Total Split (%)	18.8%	18.8%	10.0%	81.3%	71.3%	71.3%
Maximum Green (s)	18.0	18.0	7.5	93.0	81.0	81.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	10.3		102.9	103.8	91.2	
Actuated g/C Ratio	0.09		0.86	0.86	0.76	
v/c Ratio	0.48		0.28	0.71	0.39	
Control Delay	62.2		3.4	6.0	2.9	
Queue Delay	0.4		0.0	0.5	0.1	
Total Delay	62.6		3.4	6.5	3.0	
LOS	E		A	A	A	
Approach Delay	62.6			6.3	3.0	
Approach LOS	E			A	A	
90th %ile Green (s)	14.3	14.3	8.9	96.7	83.3	83.3
90th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
70th %ile Green (s)	12.0	12.0	7.8	99.0	86.7	86.7
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	10.3	10.3	7.1	100.7	89.1	89.1
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	8.6	8.6	6.6	102.4	91.3	91.3
30th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
10th %ile Green (s)	0.0	0.0	5.6	115.5	105.4	105.4
10th %ile Term Code	Skip	Skip	Gap	Coord	Coord	Coord
Queue Length 50th (ft)	55		13	244	60	
Queue Length 95th (ft)	80		28	399	12	
Internal Link Dist (ft)	1220			1050	336	
Turn Bay Length (ft)			300			
Base Capacity (vph)	265		455	2714	2384	
Starvation Cap Reductn	0		0	0	280	
Spillback Cap Reductn	44		0	360	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.33		0.27	0.82	0.44	

Intersection Summary

Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 62 (52%), Referenced to phase 2:NWT and 6:SETL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.71		
Intersection Signal Delay: 6.7		Intersection LOS: A
Intersection Capacity Utilization 60.8%		ICU Level of Service B
Analysis Period (min) 15		

Splits and Phases: 280: Donald Lee Hollowell Pkwy & Atlanta Ind. Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	176	1568	200	88	728	0	60	311	0	49	52	50
Future Volume (vph)	176	1568	200	88	728	0	60	311	0	49	52	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		200	300		0	300		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.930	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1570	3139	1404	1570	3139	0	1504	3008	0	1570	2919	0
Flt Permitted	0.242			0.059			0.635			0.253		
Satd. Flow (perm)	400	3139	1404	97	3139	0	1005	3008	0	418	2919	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214								74	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			899			1051			1138	
Travel Time (s)		9.5			20.4			23.9			25.9	
Peak Hour Factor	0.80	0.95	0.92	0.92	0.96	0.92	0.83	0.90	0.92	0.72	0.72	0.78
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	20%	20%	20%	15%	15%	15%
Adj. Flow (vph)	255	1915	252	111	880	0	84	401	0	79	84	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	255	1915	252	111	880	0	84	401	0	79	158	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.6	78.2	78.2	9.8	63.4		9.5	22.5		9.5	22.5	
Total Split (%)	20.5%	65.2%	65.2%	8.2%	52.8%		7.9%	18.8%		7.9%	18.8%	
Maximum Green (s)	20.1	73.7	73.7	5.3	58.9		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	84.6	75.2	75.2	74.5	68.5		21.8	17.8		21.8	17.8	
Actuated g/C Ratio	0.70	0.63	0.63	0.62	0.57		0.18	0.15		0.18	0.15	
v/c Ratio	0.63	0.97	0.26	0.83	0.49		0.41	0.90		0.64	0.32	
Control Delay	13.7	33.5	2.4	71.9	11.2		46.4	74.4		63.5	26.0	
Queue Delay	0.1	14.9	0.4	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.8	48.4	2.8	71.9	11.2		46.4	74.4		63.5	26.0	
LOS	B	D	A	E	B		D	E		E	C	
Approach Delay		40.0			18.0			69.5			38.5	
Approach LOS		D			B			E			D	
90th %ile Green (s)	17.3	73.7	73.7	5.3	61.7		5.0	18.0		5.0	18.0	
90th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
70th %ile Green (s)	14.1	73.7	73.7	5.3	64.9		5.0	18.0		5.0	18.0	
70th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
50th %ile Green (s)	12.5	73.7	73.7	5.3	66.5		5.0	18.0		5.0	18.0	
50th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
30th %ile Green (s)	11.1	73.7	73.7	5.3	67.9		5.0	18.0		5.0	18.0	
30th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
10th %ile Green (s)	8.0	81.0	81.0	8.6	81.6		0.0	16.9		0.0	16.9	
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Skip	Gap		Skip	Hold	
Queue Length 50th (ft)	42	733	12	47	93		53	162		50	30	
Queue Length 95th (ft)	90	#941	m34	#165	253		92	#252		74	44	
Internal Link Dist (ft)		336			819			971			1058	
Turn Bay Length (ft)	200		200	300			300			200		
Base Capacity (vph)	481	1965	959	133	1792		203	451		124	500	
Starvation Cap Reductn	8	113	348	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.54	1.03	0.41	0.83	0.49		0.41	0.89		0.64	0.32	

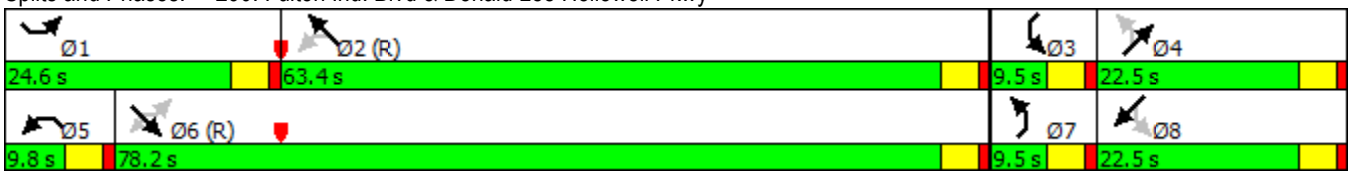
Intersection Summary

Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 54 (45%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 38.1	Intersection LOS: D
Intersection Capacity Utilization 85.1%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 290: Fulton Ind. Blvd & Donald Lee Hollowell Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	8	1234	31	38	1038	14	13	31	62	18	14	12
Future Volume (vph)	8	1234	31	38	1038	14	13	31	62	18	14	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.998			0.921			0.964	
Flt Protected	0.950			0.950				0.994			0.980	
Satd. Flow (prot)	1444	3082	0	1719	3191	0	0	1696	0	0	1699	0
Flt Permitted	0.163			0.131				0.963			0.571	
Satd. Flow (perm)	248	3082	0	237	3191	0	0	1643	0	0	990	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2			50			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		899			304			783			722	
Travel Time (s)		20.4			6.9			17.8			16.4	
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.93	0.93	0.93	0.72	0.72	0.72
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	25%	17%	3%	5%	13%	7%	2%	2%	3%	11%	2%	2%
Adj. Flow (vph)	9	1461	37	52	1417	19	16	39	77	29	23	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1498	0	52	1436	0	0	132	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	

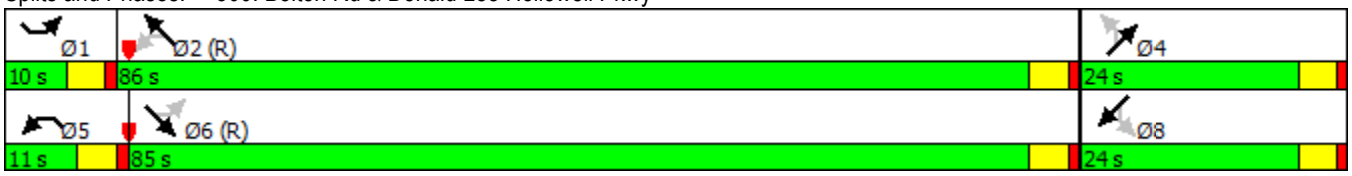
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	10.0	85.0		11.0	86.0		24.0	24.0		24.0	24.0	
Total Split (%)	8.3%	70.8%		9.2%	71.7%		20.0%	20.0%		20.0%	20.0%	
Maximum Green (s)	5.5	80.5		6.5	81.5		19.5	19.5		19.5	19.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	95.4	90.8		98.8	97.4			11.5			11.5	
Actuated g/C Ratio	0.80	0.76		0.82	0.81			0.10			0.10	
v/c Ratio	0.04	0.64		0.19	0.55			0.65			0.67	
Control Delay	1.4	5.0		3.3	6.6			46.5			70.5	
Queue Delay	0.0	0.4		0.0	0.4			0.9			1.5	
Total Delay	1.4	5.4		3.3	7.0			47.5			72.0	
LOS	A	A		A	A			D			E	
Approach Delay		5.3			6.9			47.5			72.0	
Approach LOS		A			A			D			E	
90th %ile Green (s)	6.0	81.9		7.1	83.0		17.5	17.5		17.5	17.5	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	0.0	86.1		6.5	97.1		13.9	13.9		13.9	13.9	
70th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	88.9		6.1	99.5		11.5	11.5		11.5	11.5	
50th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	91.6		5.8	101.9		9.1	9.1		9.1	9.1	
30th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	105.5		0.0	105.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Skip	Coord		Skip	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	1	160		2	25			61			44	
Queue Length 95th (ft)	m1	m9		m12	m526			122			69	
Internal Link Dist (ft)		819			224			703			642	
Turn Bay Length (ft)	400			150								
Base Capacity (vph)	253	2333		276	2590			308			171	
Starvation Cap Reductn	0	0		0	565			0			0	
Spillback Cap Reductn	0	323		0	0			53			29	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.04	0.75		0.19	0.71			0.52			0.50	

Intersection Summary

Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 68 (57%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 300: Bolton Rd & Donald Lee Hollowell Pkwy



Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	0	0	0	843	526	158	636	0	76	0	419
Future Volume (vph)	0	0	0	843	526	158	636	0	76	0	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00
Frt				0.942							0.850
Flt Protected						0.950			0.950		
Satd. Flow (prot)	0	0	0	3012	0	1262	3252	0	2736	0	1417
Flt Permitted						0.061			0.950		
Satd. Flow (perm)	0	0	0	3012	0	81	3252	0	2736	0	1417
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				165							240
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	922			304			568			593	
Travel Time (s)	21.0			6.9			12.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.87	0.87	0.87
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	11%	16%	43%	11%	2%	28%	2%	14%
Adj. Flow (vph)	0	0	0	1063	663	191	769	0	101	0	559
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	0	1726	0	191	769	0	101	0	559
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			24			24			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors				2		1	2		1		1
Detector Template				Thru		Left	Thru		Left		Right
Leading Detector (ft)				100		20	100		20		20
Trailing Detector (ft)				0		0	0		0		0
Detector 1 Position(ft)				0		0	0		0		0
Detector 1 Size(ft)				6		20	6		20		20
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type				NA		pm+pt	NA		Prot		Perm
Protected Phases				6		5	2		3		
Permitted Phases						2					8
Detector Phase				6		5	2		3		8

Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Switch Phase											
Minimum Initial (s)				5.0		5.0	5.0		5.0		5.0
Minimum Split (s)				22.5		9.5	22.5		9.5		22.5
Total Split (s)				65.6		18.4	84.0		36.0		36.0
Total Split (%)				54.7%		15.3%	70.0%		30.0%		30.0%
Maximum Green (s)				61.1		13.9	79.5		31.5		31.5
Yellow Time (s)				3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)				0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)				4.5		4.5	4.5		4.5		4.5
Lead/Lag				Lag		Lead					
Lead-Lag Optimize?				Yes		Yes					
Vehicle Extension (s)				3.0		3.0	3.0		3.0		3.0
Recall Mode				C-Min		None	C-Min		None		None
Walk Time (s)				7.0			7.0				7.0
Flash Dont Walk (s)				11.0			11.0				11.0
Pedestrian Calls (#/hr)				0			0				0
Act Effct Green (s)				61.1		79.5	79.5		31.5		31.5
Actuated g/C Ratio				0.51		0.66	0.66		0.26		0.26
v/c Ratio				1.07		1.01	0.36		0.14		1.02
Control Delay				60.1		99.7	6.9		34.6		69.2
Queue Delay				0.5		0.0	0.0		0.0		9.9
Total Delay				60.7		99.7	7.0		34.6		79.1
LOS				E		F	A		C		E
Approach Delay				60.7			25.4			72.3	
Approach LOS				E			C			E	
90th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
90th %ile Term Code				Coord		Max	Coord		Hold		Max
70th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
70th %ile Term Code				Coord		Max	Coord		Hold		Max
50th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
50th %ile Term Code				Coord		Max	Coord		Hold		Max
30th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
30th %ile Term Code				Coord		Max	Coord		Hold		Max
10th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
10th %ile Term Code				Coord		Max	Coord		Hold		Max
Queue Length 50th (ft)				~736		~123	143		30		~311
Queue Length 95th (ft)				#871		m#237	127		52		#497
Internal Link Dist (ft)	842			224			488			513	
Turn Bay Length (ft)											
Base Capacity (vph)				1614		190	2154		718		548
Starvation Cap Reductn				2		0	0		0		0
Spillback Cap Reductn				0		0	228		0		16
Storage Cap Reductn				0		0	0		0		0
Reduced v/c Ratio				1.07		1.01	0.40		0.14		1.05

Intersection Summary	
Area Type:	Other
Cycle Length: 120	

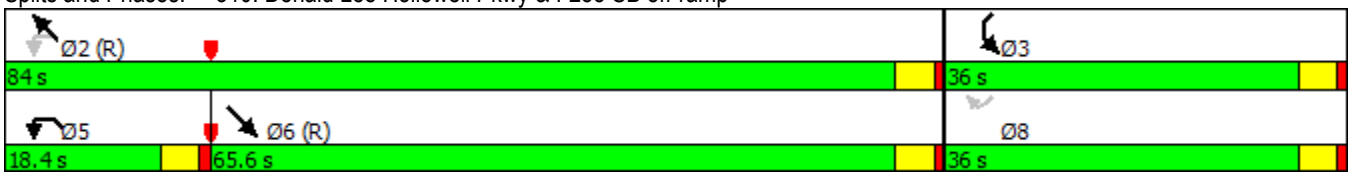
Actuated Cycle Length: 120	
Offset: 62 (52%), Referenced to phase 2:NWTL and 6:SET, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 52.9	Intersection LOS: D
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 310: Donald Lee Hollowell Pkwy & I-285 SB off-ramp



Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (vph)	0	0	443	477	0	0	352	133	451	0	206
Future Volume (vph)	0	0	443	477	0	0	352	133	451	0	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300		0	0		0		0	0
Storage Lanes	0	0	1		0	0		0		2	1
Taper Length (ft)	25		25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00
Frt							0.959				0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1504	3167	0	0	3874	0	3127	0	1335
Flt Permitted			0.280						0.950		
Satd. Flow (perm)	0	0	443	3167	0	0	3874	0	3127	0	1335
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)							74				347
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	782			568			1114			887	
Travel Time (s)	17.8			12.9			25.3			20.2	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.90	0.83	0.83	0.83	0.94	0.94	0.94
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	20%	14%	2%	2%	24%	40%	12%	2%	21%
Adj. Flow (vph)	0	0	571	615	0	0	492	186	557	0	254
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	571	615	0	0	678	0	557	0	254
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			pm+pt	NA			NA		Prot		Perm

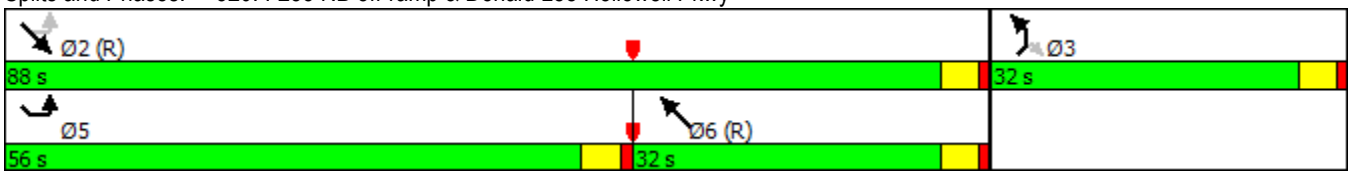
Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Protected Phases			5	2			6		3		
Permitted Phases			2								3
Detector Phase			5	2			6		3		3
Switch Phase											
Minimum Initial (s)			5.0	5.0			5.0		5.0		5.0
Minimum Split (s)			9.5	22.5			22.5		9.5		9.5
Total Split (s)			56.0	88.0			32.0		32.0		32.0
Total Split (%)			46.7%	73.3%			26.7%		26.7%		26.7%
Maximum Green (s)			51.5	83.5			27.5		27.5		27.5
Yellow Time (s)			3.5	3.5			3.5		3.5		3.5
All-Red Time (s)			1.0	1.0			1.0		1.0		1.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			4.5	4.5			4.5		4.5		4.5
Lead/Lag			Lead				Lag				
Lead-Lag Optimize?			Yes				Yes				
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			Min	C-Min			C-Min		None		None
Walk Time (s)				7.0			7.0				
Flash Dont Walk (s)				11.0			11.0				
Pedestrian Calls (#/hr)				0			0				
Act Effct Green (s)			85.6	85.6			42.0		25.4		25.4
Actuated g/C Ratio			0.71	0.71			0.35		0.21		0.21
v/c Ratio			0.86	0.27			0.48		0.84		0.46
Control Delay			14.2	1.3			31.2		57.5		3.2
Queue Delay			0.4	0.0			0.0		0.0		0.0
Total Delay			14.6	1.3			31.2		57.5		3.2
LOS			B	A			C		E		A
Approach Delay				7.7			31.2			40.5	
Approach LOS				A			C			D	
90th %ile Green (s)			51.5	83.5			27.5		27.5		27.5
90th %ile Term Code			Max	Coord			Coord		Max		Max
70th %ile Green (s)			47.8	82.8			30.5		28.2		28.2
70th %ile Term Code			Gap	Coord			Coord		Max		Max
50th %ile Green (s)			41.0	83.8			38.3		27.2		27.2
50th %ile Term Code			Gap	Coord			Coord		Gap		Gap
30th %ile Green (s)			33.2	87.0			49.3		24.0		24.0
30th %ile Term Code			Gap	Coord			Coord		Gap		Gap
10th %ile Green (s)			21.8	90.7			64.4		20.3		20.3
10th %ile Term Code			Gap	Coord			Coord		Gap		Gap
Queue Length 50th (ft)			82	10			139		210		0
Queue Length 95th (ft)			m58	m18			186		275		7
Internal Link Dist (ft)	702			488			1034			807	
Turn Bay Length (ft)			300								
Base Capacity (vph)			771	2261			1403		720		574
Starvation Cap Reductn			30	0			0		0		0
Spillback Cap Reductn			0	0			0		0		0
Storage Cap Reductn			0	0			0		0		0
Reduced v/c Ratio			0.77	0.27			0.48		0.77		0.44

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 18 (15%), Referenced to phase 2:SETL and 6:NWT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 23.6		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 320: I-285 NB off-ramp & Donald Lee Hollowell Pkwy



2031 PM Synchro Analysis Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	165	332	92	89	465	18	96	301	90	93	621	535
Future Volume (vph)	165	332	92	89	465	18	96	301	90	93	621	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	400		400	300		300
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.994				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1810	1482	1752	1761	0	1805	3438	1568	1327	2983	1468
Flt Permitted	0.111			0.324			0.223			0.407		
Satd. Flow (perm)	205	1810	1482	598	1761	0	424	3438	1568	569	2983	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116		2				115			276
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			851			3037			3592	
Travel Time (s)		18.4			19.3			69.0			81.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	3%	5%	9%	3%	7%	13%	0%	5%	3%	36%	21%	10%
Adj. Flow (vph)	208	419	116	112	586	23	121	380	113	117	783	675
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	419	116	112	609	0	121	380	113	117	783	675
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

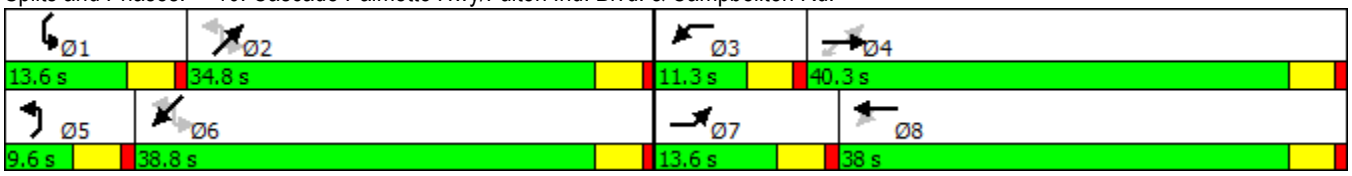
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.6	40.3	40.3	11.3	38.0		9.6	34.8	34.8	13.6	38.8	38.8
Total Split (%)	13.6%	40.3%	40.3%	11.3%	38.0%		9.6%	34.8%	34.8%	13.6%	38.8%	38.8%
Maximum Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	45.0	35.9	35.9	40.2	33.5		35.8	30.7	30.7	43.0	34.3	34.3
Actuated g/C Ratio	0.45	0.36	0.36	0.40	0.34		0.36	0.31	0.31	0.43	0.34	0.34
v/c Ratio	0.90	0.65	0.19	0.35	1.03		0.55	0.36	0.20	0.38	0.77	0.99
Control Delay	60.5	32.4	5.1	18.6	79.1		28.4	28.3	5.8	21.2	35.2	52.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	32.4	5.1	18.6	79.1		28.4	28.3	5.8	21.2	35.2	52.1
LOS	E	C	A	B	E		C	C	A	C	D	D
Approach Delay		36.0			69.7			24.2			41.4	
Approach LOS		D			E			C			D	
90th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
70th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
50th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
30th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
30th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
10th %ile Green (s)	9.1	36.2	36.2	6.4	33.5		5.1	32.5	32.5	6.9	34.3	34.3
10th %ile Term Code	Max	Hold	Hold	Gap	Max		Max	Hold	Hold	Gap	Max	Max
Queue Length 50th (ft)	81	220	0	39	~418		45	99	0	45	231	285
Queue Length 95th (ft)	#216	327	36	71	#634		81	141	38	83	305	#539
Internal Link Dist (ft)		728			771			2957			3512	
Turn Bay Length (ft)	300		300	300			400		400	300		300
Base Capacity (vph)	232	649	606	319	591		222	1056	561	315	1023	684
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.65	0.19	0.35	1.03		0.55	0.36	0.20	0.37	0.77	0.99

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 43.0	Intersection LOS: D
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 100	
70th %ile Actuated Cycle: 100	
50th %ile Actuated Cycle: 100	
30th %ile Actuated Cycle: 100	
10th %ile Actuated Cycle: 100	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Cascade Palmetto Hwy/Fulton Ind. Blvd. & Campbellton Rd.



Intersection	
Int Delay, s/veh	107.1

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	79	70	16	487	16	1246	39
Future Vol, veh/h	79	70	16	487	16	1246	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Yield
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	68	68	92	92	74	74	74
Heavy Vehicles, %	10	17	13	13	6	3	28
Mvmt Flow	135	119	20	614	25	1953	61

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2350	977	1953	0	448	-	0
Stage 1	2003	-	-	-	-	-	-
Stage 2	347	-	-	-	-	-	-
Critical Hdwy	7	7.24	4.36	-	6.52	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.6	3.47	2.33	-	2.56	-	-
Pot Cap-1 Maneuver	~ 27	224	256	-	730	-	-
Stage 1	~ 82	-	-	-	-	-	-
Stage 2	664	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 25	224	256	-	730	-	-
Mov Cap-2 Maneuver	~ 25	-	-	-	-	-	-
Stage 1	~ 82	-	-	-	-	-	-
Stage 2	612	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 1231	0.6	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	256	-	25	224	730	-	-
HCM Lane V/C Ratio	0.079	-	5.391	0.533	0.034	-	-
HCM Control Delay (s)	20.3	$	2288.1	38	10.1	-	-
HCM Lane LOS	C	-	F	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	16.7	2.8	0.1	-	-

Notes

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

Intersection	
Int Delay, s/veh	90.4

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	71	73	10	484	4	1369	76
Future Vol, veh/h	71	73	10	484	4	1369	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	None
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	58	58	85	85	93	93	93
Heavy Vehicles, %	28	10	10	16	25	5	50
Mvmt Flow	142	146	14	661	5	1708	95

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2076	854	1708	0	482	-	0
Stage 1	1718	-	-	-	-	-	-
Stage 2	358	-	-	-	-	-	-
Critical Hdwy	7.36	7.1	4.3	-	6.9	-	-
Critical Hdwy Stg 1	6.36	-	-	-	-	-	-
Critical Hdwy Stg 2	6.36	-	-	-	-	-	-
Follow-up Hdwy	3.78	3.4	2.3	-	2.75	-	-
Pot Cap-1 Maneuver	~ 34	286	334	-	621	-	-
Stage 1	~ 99	-	-	-	-	-	-
Stage 2	607	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 33	286	334	-	621	-	-
Mov Cap-2 Maneuver	~ 33	-	-	-	-	-	-
Stage 1	~ 99	-	-	-	-	-	-
Stage 2	582	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 868.7	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	334	-	33	286	621	-	-
HCM Lane V/C Ratio	0.041	-	4.303	0.51	0.008	-	-
HCM Control Delay (s)	16.2	$	1731.1	30	10.8	-	-
HCM Lane LOS	C	-	F	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	16.8	2.7	0	-	-

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

Intersection	
Int Delay, s/veh	258

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	50	44	131	58	14	54	19	590	70	60	1086	38
Future Vol, veh/h	50	44	131	58	14	54	19	590	70	60	1086	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	300	-	200	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	91	91	91	86	86	86	89	89	89
Heavy Vehicles, %	26	0	13	7	7	4	42	12	1	2	8	40
Mvmt Flow	74	65	195	74	18	69	26	796	94	78	1415	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2030	2419	708	1744	2419	398	1415	0	0	796	0	0
Stage 1	1572	1572	-	847	847	-	-	-	-	-	-	-
Stage 2	458	847	-	897	1572	-	-	-	-	-	-	-
Critical Hdwy	8.02	6.5	7.16	7.64	6.64	6.98	4.94	-	-	4.14	-	-
Critical Hdwy Stg 1	7.02	5.5	-	6.64	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.02	5.5	-	6.64	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.76	4	3.43	3.57	4.07	3.34	2.62	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 25	~ 33	353	~ 52	30	596	316	-	-	822	-	-
Stage 1	91	172	-	313	365	-	-	-	-	-	-	-
Stage 2	493	381	-	291	161	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 8	~ 27	353	-	25	596	316	-	-	822	-	-
Mov Cap-2 Maneuver	~ 8	~ 27	-	-	25	-	-	-	-	-	-	-
Stage 1	84	156	-	287	335	-	-	-	-	-	-	-
Stage 2	379	350	-	~ 69	146	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, $	2274.1		0.5	0.5
HCM LOS	F	-		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SELn2	SWL	SWT	SWR
Capacity (veh/h)	316	-	-	-	12	353	822	-	-
HCM Lane V/C Ratio	0.081	-	-	-	11.65	0.552	0.095	-	-
HCM Control Delay (s)	17.4	-	-	$	5405.6	27.1	9.8	-	-
HCM Lane LOS	C	-	-	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	18.8	3.2	0.3	-	-

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	50	50	50	42	50	100	679	50	126	957	100
Future Volume (vph)	100	50	50	50	42	50	100	679	50	126	957	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		150
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.925			0.952			0.990				0.850
Flt Protected	0.950				0.983		0.950			0.950		
Satd. Flow (prot)	1128	1098	0	0	1482	0	1128	2978	0	1504	3008	897
Flt Permitted	0.478				0.836		0.116			0.214		
Satd. Flow (perm)	568	1098	0	0	1260	0	138	2978	0	339	3008	897
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		58			27			11				127
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		812			1105			708			889	
Travel Time (s)		18.5			25.1			16.1			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	60%	60%	60%	20%	20%	20%	60%	20%	20%	20%	20%	80%
Adj. Flow (vph)	126	63	63	63	53	63	126	856	63	159	1207	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	126	0	0	179	0	126	919	0	159	1207	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	10.0	32.5		22.5	22.5		12.0	44.9		12.6	45.5	45.5
Total Split (%)	11.1%	36.1%		25.0%	25.0%		13.3%	49.9%		14.0%	50.6%	50.6%
Maximum Green (s)	5.5	28.0		18.0	18.0		7.5	40.4		8.1	41.0	41.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		Min	Min		None	Min		None	Min	Min
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0			0	0
Act Effct Green (s)	21.8	21.8			14.3		46.3	38.5		46.6	38.7	38.7
Actuated g/C Ratio	0.27	0.27			0.17		0.56	0.47		0.57	0.47	0.47
v/c Ratio	0.67	0.38			0.74		0.74	0.65		0.52	0.85	0.26
Control Delay	44.1	17.7			47.7		43.6	20.4		14.7	27.6	4.3
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	44.1	17.7			47.7		43.6	20.4		14.7	27.6	4.3
LOS	D	B			D		D	C		B	C	A
Approach Delay		30.9			47.7			23.2			24.3	
Approach LOS		C			D			C			C	
90th %ile Green (s)	5.5	28.0		18.0	18.0		7.5	40.4		8.1	41.0	41.0
90th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	Max
70th %ile Green (s)	5.5	28.0		18.0	18.0		7.5	40.4		8.1	41.0	41.0
70th %ile Term Code	Max	Hold		Max	Max		Max	Hold		Max	Max	Max
50th %ile Green (s)	5.5	26.0		16.0	16.0		7.5	40.4		8.1	41.0	41.0
50th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Max	Max
30th %ile Green (s)	5.5	22.7		12.7	12.7		7.5	39.6		8.1	40.2	40.2
30th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Gap	Gap
10th %ile Green (s)	0.0	8.1		8.1	8.1		7.5	30.3		6.5	29.3	29.3
10th %ile Term Code	Skip	Hold		Gap	Gap		Max	Hold		Gap	Gap	Gap
Queue Length 50th (ft)	55	28			80		30	199		36	302	0
Queue Length 95th (ft)	#111	75			#165		#132	279		68	#456	31
Internal Link Dist (ft)		732			1025			628			809	
Turn Bay Length (ft)							300			300		150
Base Capacity (vph)	189	422			305		170	1512		312	1544	522
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.67	0.30			0.59		0.74	0.61		0.51	0.78	0.24

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 82.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 25.9	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 90	
50th %ile Actuated Cycle: 88	
30th %ile Actuated Cycle: 83.9	
10th %ile Actuated Cycle: 58.4	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: Fulton Ind. Blvd. & Boat Rock Blvd./Boat Rock Rd.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1102	7	20	1118	31	4	0	30	32	0	7
Future Volume (vph)	9	1102	7	20	1118	31	4	0	30	32	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950				0.950		0.950		
Satd. Flow (prot)	1081	3223	1615	1289	3252	912	0	1444	1495	1347	1252	0
Flt Permitted	0.162			0.117						0.513		
Satd. Flow (perm)	184	3223	1615	159	3252	912	0	1520	1495	727	1252	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127		222	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		849			1099			609			533	
Travel Time (s)		19.3			25.0			13.8			12.1	
Peak Hour Factor	0.86	0.86	0.86	0.98	0.98	0.98	0.72	0.72	0.72	0.60	0.60	0.60
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	67%	12%	0%	40%	11%	77%	25%	0%	8%	34%	0%	29%
Adj. Flow (vph)	12	1486	9	24	1323	37	6	0	48	62	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	1486	9	24	1323	37	0	6	48	62	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	9.5	48.5	48.5	9.5	48.5	48.5	9.5	22.5	22.5	9.5	22.5	
Total Split (%)	10.6%	53.9%	53.9%	10.6%	53.9%	53.9%	10.6%	25.0%	25.0%	10.6%	25.0%	
Maximum Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	5.0	18.0	18.0	5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	47.1	48.0	48.0	47.8	49.6	49.6		6.4	6.4	10.9	11.2	
Actuated g/C Ratio	0.74	0.75	0.75	0.75	0.78	0.78		0.10	0.10	0.17	0.18	
v/c Ratio	0.06	0.61	0.01	0.11	0.52	0.05		0.04	0.18	0.35	0.03	
Control Delay	4.9	10.7	0.0	5.4	7.8	0.1		33.2	1.5	31.1	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	4.9	10.7	0.0	5.4	7.8	0.1		33.2	1.5	31.1	0.1	
LOS	A	B	A	A	A	A		C	A	C	A	
Approach Delay		10.6			7.6			5.0			25.4	
Approach LOS		B			A			A			C	
90th %ile Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	0.0	7.2	7.2	5.0	16.7	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Skip	Gap	Gap	Max	Hold	
70th %ile Green (s)	0.0	44.0	44.0	5.0	53.5	53.5	0.0	6.4	6.4	5.0	15.9	
70th %ile Term Code	Skip	Max	Max	Max	Hold	Hold	Skip	Gap	Gap	Max	Hold	
50th %ile Green (s)	0.0	45.8	45.8	0.0	45.8	45.8	0.0	5.8	5.8	5.0	15.3	
50th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Gap	Gap	Max	Hold	
30th %ile Green (s)	0.0	46.1	46.1	0.0	46.1	46.1	0.0	0.0	0.0	0.0	0.0	
30th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
10th %ile Green (s)	0.0	35.9	35.9	0.0	35.9	35.9	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	2	184	0	3	149	0		2	0	22	0	
Queue Length 95th (ft)	6	359	0	10	317	0		11	0	37	0	
Internal Link Dist (ft)		769			1019			529			453	
Turn Bay Length (ft)	300		300	300		300						
Base Capacity (vph)	211	2430	1249	214	2531	738		460	541	176	534	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.06	0.61	0.01	0.11	0.52	0.05		0.01	0.09	0.35	0.03	

Intersection Summary

Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 63.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 79.2			
70th %ile Actuated Cycle: 78.4			
50th %ile Actuated Cycle: 70.1			
30th %ile Actuated Cycle: 50.6			
10th %ile Actuated Cycle: 40.4			

Splits and Phases: 70: Lakeview Ct. & Fulton Ind. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	883	100	245	769	230	300	610	100	101	300	185
Future Volume (vph)	213	883	100	245	769	230	300	610	100	101	300	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	350		300	350		300	300		300
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			205			206			143			263
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1099			761			631			649	
Travel Time (s)		25.0			17.3			14.3			14.8	
Peak Hour Factor	0.79	0.93	0.92	0.81	0.91	0.92	0.91	0.91	0.91	0.81	0.81	0.81
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	313	1101	126	351	980	290	382	778	127	145	430	265
Shared Lane Traffic (%)												
Lane Group Flow (vph)	313	1101	126	351	980	290	382	778	127	145	430	265
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

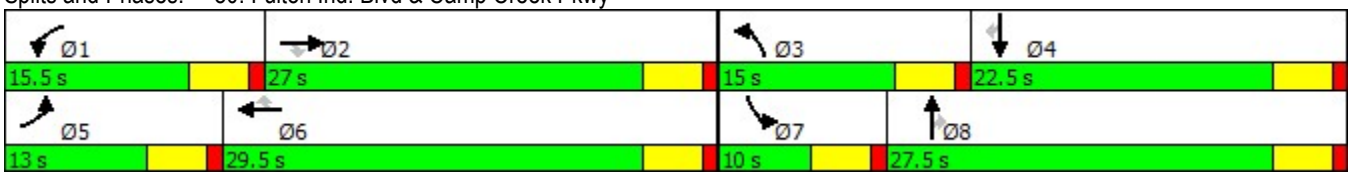
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	27.0	27.0	15.5	29.5	29.5	15.0	27.5	27.5	10.0	22.5	22.5
Total Split (%)	16.3%	33.8%	33.8%	19.4%	36.9%	36.9%	18.8%	34.4%	34.4%	12.5%	28.1%	28.1%
Maximum Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.5	22.3	22.3	10.7	24.5	24.5	10.5	21.4	21.4	5.5	16.4	16.4
Actuated g/C Ratio	0.11	0.29	0.29	0.14	0.31	0.31	0.13	0.27	0.27	0.07	0.21	0.21
v/c Ratio	0.84	0.76	0.21	0.75	0.88	0.45	0.83	0.80	0.24	0.60	0.58	0.49
Control Delay	55.9	29.7	1.4	43.8	36.7	9.5	50.3	33.5	4.6	47.1	31.1	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.9	29.7	1.4	43.8	36.7	9.5	50.3	33.5	4.6	47.1	31.1	7.2
LOS	E	C	A	D	D	A	D	C	A	D	C	A
Approach Delay		32.7			33.4			35.6			26.3	
Approach LOS		C			C			D			C	
90th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
50th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Hold	Hold
30th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	21.6	21.6	5.5	16.6	16.6
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Gap	Gap	Max	Hold	Hold
10th %ile Green (s)	8.5	21.5	21.5	9.6	22.6	22.6	10.5	17.0	17.0	5.5	12.0	12.0
10th %ile Term Code	Max	Hold	Hold	Gap	Gap	Gap	Max	Gap	Gap	Max	Hold	Hold
Queue Length 50th (ft)	80	184	0	88	242	30	97	185	0	37	100	1
Queue Length 95th (ft)	#119	233	7	117	#355	93	#170	251	31	59	128	40
Internal Link Dist (ft)		1019			681			551			569	
Turn Bay Length (ft)	300		300	350		300	350		300	300		300
Base Capacity (vph)	374	1468	603	485	1135	647	462	1044	568	242	817	568
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.75	0.21	0.72	0.86	0.45	0.83	0.75	0.22	0.60	0.53	0.47

Intersection Summary

Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 78	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 32.6	Intersection LOS: C
Intersection Capacity Utilization 70.4%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 80	
70th %ile Actuated Cycle: 80	
50th %ile Actuated Cycle: 80	
30th %ile Actuated Cycle: 78.6	
10th %ile Actuated Cycle: 71.6	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 80: Fulton Ind. Blvd & Camp Creek Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Future Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		300	300		300
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1900	1568	1736	1429	1538	1641	3252	1442	1671	3252	1380
Flt Permitted	0.731			0.732			0.050			0.100		
Satd. Flow (perm)	1362	1900	1568	1337	1429	1538	86	3252	1442	176	3252	1380
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109			113			76
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		458			669			1465			1699	
Travel Time (s)		10.4			15.2			33.3			38.6	
Peak Hour Factor	0.67	0.67	0.67	0.97	0.97	0.97	0.95	0.95	0.95	0.82	0.82	0.82
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	0%	3%	4%	33%	5%	10%	11%	12%	8%	11%	17%
Adj. Flow (vph)	87	38	566	257	12	84	121	1324	140	161	2174	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	38	566	257	12	84	121	1324	140	161	2174	11
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

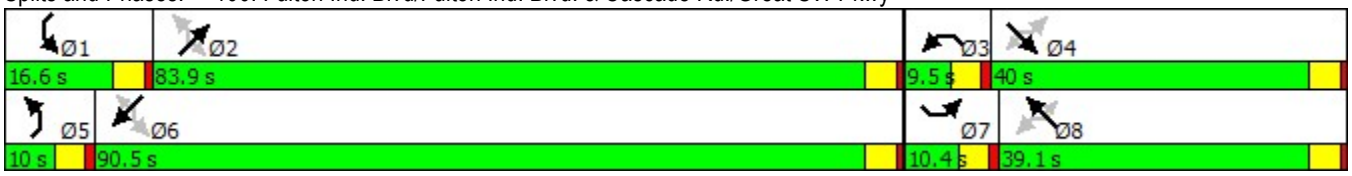
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.4	40.0	40.0	9.5	39.1	39.1	10.0	83.9	83.9	16.6	90.5	90.5
Total Split (%)	6.9%	26.7%	26.7%	6.3%	26.1%	26.1%	6.7%	55.9%	55.9%	11.1%	60.3%	60.3%
Maximum Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	79.4	79.4	12.1	86.0	86.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	41.4	35.5	35.5	39.6	34.6	34.6	86.1	80.6	80.6	95.7	86.0	86.0
Actuated g/C Ratio	0.28	0.24	0.24	0.26	0.23	0.23	0.57	0.54	0.54	0.64	0.57	0.57
v/c Ratio	0.22	0.08	1.25	0.70	0.04	0.19	1.14	0.76	0.17	0.73	1.17	0.01
Control Delay	41.0	45.4	165.7	59.7	45.4	4.5	161.6	30.8	5.1	36.0	111.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	45.4	165.7	59.7	45.4	4.5	161.6	30.8	5.1	36.0	111.9	0.0
LOS	D	D	F	E	D	A	F	C	A	D	F	A
Approach Delay		143.4			46.1			38.5			106.2	
Approach LOS		F			D			D			F	
90th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	79.4	79.4	12.1	86.0	86.0
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	79.4	79.4	12.1	86.0	86.0
70th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	80.0	80.0	11.5	86.0	86.0
50th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
30th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	81.3	81.3	10.2	86.0	86.0
30th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
10th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	83.0	83.0	8.5	86.0	86.0
10th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
Queue Length 50th (ft)	63	29	~604	208	9	0	~91	522	12	59	~1325	0
Queue Length 95th (ft)	80	46	#485	298	28	26	#231	622	48	110	#1237	0
Internal Link Dist (ft)		378			589			1385			1619	
Turn Bay Length (ft)							300		300	300		300
Base Capacity (vph)	391	449	454	366	329	438	106	1747	827	233	1864	823
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.08	1.25	0.70	0.04	0.19	1.14	0.76	0.17	0.69	1.17	0.01

Intersection Summary

Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 85.5	Intersection LOS: F
Intersection Capacity Utilization 97.8%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 150	
70th %ile Actuated Cycle: 150	
50th %ile Actuated Cycle: 150	
30th %ile Actuated Cycle: 150	
10th %ile Actuated Cycle: 150	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Fulton Ind. Blvd/Fulton Ind. Blvd. & Cascade Rd./Great SW Pkwy



Intersection	
Int Delay, s/veh	32

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	10	11	1	68	73	1301	49	121	816	39
Future Vol, veh/h	6	0	10	11	1	68	73	1301	49	121	816	39
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	88	88	88	97	97	97	80	80	80
Heavy Vehicles, %	17	0	60	18	0	29	4	12	10	9	16	28
Mvmt Flow	11	0	18	15	1	90	87	1556	59	175	1183	57

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2487	3264	592	2673	3264	778	1183	0	-	1556	0	0
Stage 1	1534	1534	-	1730	1730	-	-	-	-	-	-	-
Stage 2	953	1730	-	943	1534	-	-	-	-	-	-	-
Critical Hdwy	7.84	6.5	8.1	7.86	6.5	7.48	4.18	-	-	4.28	-	-
Critical Hdwy Stg 1	6.84	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.84	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4	3.9	3.68	4	3.59	2.24	-	-	2.29	-	-
Pot Cap-1 Maneuver	12	9	330	~ 8	9	286	575	-	0	389	-	-
Stage 1	105	180	-	77	144	-	-	-	0	-	-	-
Stage 2	251	144	-	253	180	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	~ 4	4	330	~ 4	4	286	575	-	-	389	-	-
Mov Cap-2 Maneuver	~ 4	4	-	~ 4	4	-	-	-	-	-	-	-
Stage 1	89	99	-	65	122	-	-	-	-	-	-	-
Stage 2	145	122	-	131	99	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 1620.8	$ 469.6	0.7	2.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	575	-	10	4	286	389	-	-
HCM Lane V/C Ratio	0.152	-	2.946	3.955	0.313	0.451	-	-
HCM Control Delay (s)	12.4	$	$ 1620.8	$ 2999.3	23.2	21.6	-	-
HCM Lane LOS	B	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0.5	-	4.8	3.3	1.3	2.3	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	762	0	100	1570	0	0	9	0	0	59	0
Future Volume (vph)	100	762	0	100	1570	0	0	9	0	0	59	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		250	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt												
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1570	3139	1652	1570	3139	1652	0	2407	0	0	2407	0
Flt Permitted	0.036			0.237								
Satd. Flow (perm)	59	3139	1652	392	3139	1652	0	2407	0	0	2407	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		642			731			251			574	
Travel Time (s)		14.6			16.6			5.7			13.0	
Peak Hour Factor	0.92	0.80	0.92	0.92	0.80	0.92	0.92	0.45	0.92	0.87	0.87	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	50%	50%	50%	50%	50%	50%
Adj. Flow (vph)	126	1105	0	126	2277	0	0	23	0	0	79	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	1105	0	126	2277	0	0	23	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm		NA			NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	13.0	113.1	113.1	14.4	114.5	114.5	22.5	22.5		22.5	22.5	
Total Split (%)	8.7%	75.4%	75.4%	9.6%	76.3%	76.3%	15.0%	15.0%		15.0%	15.0%	
Maximum Green (s)	8.5	108.6	108.6	9.9	110.0	110.0	18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	
Act Effct Green (s)	119.8	111.3		117.2	110.0			10.0			10.0	
Actuated g/C Ratio	0.84	0.78		0.83	0.77			0.07			0.07	
v/c Ratio	0.90	0.45		0.33	0.94			0.14			0.47	
Control Delay	90.7	6.0		4.0	22.7			63.3			72.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	90.7	6.0		4.0	22.7			63.3			72.4	
LOS	F	A		A	C			E			E	
Approach Delay		14.7			21.8			63.3			72.4	
Approach LOS		B			C			E			E	
90th %ile Green (s)	8.5	109.9	109.9	8.6	110.0	110.0	13.4	13.4		13.4	13.4	
90th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
70th %ile Green (s)	8.5	110.8	110.8	7.7	110.0	110.0	11.4	11.4		11.4	11.4	
70th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
50th %ile Green (s)	8.5	111.4	111.4	7.1	110.0	110.0	10.0	10.0		10.0	10.0	
50th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
30th %ile Green (s)	8.5	111.9	111.9	6.6	110.0	110.0	8.7	8.7		8.7	8.7	
30th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
10th %ile Green (s)	8.5	112.5	112.5	6.0	110.0	110.0	6.7	6.7		6.7	6.7	
10th %ile Term Code	Max	Hold	Hold	Gap	Max	Max	Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	72	153		12	789			10			37	
Queue Length 95th (ft)	#208	183		26	717			13			64	
Internal Link Dist (ft)		562			651			171			494	
Turn Bay Length (ft)	300			300								
Base Capacity (vph)	140	2460		413	2431			305			305	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.90	0.45		0.31	0.94			0.08			0.26	

Intersection Summary

Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 142	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 145.4	
70th %ile Actuated Cycle: 143.4	
50th %ile Actuated Cycle: 142	
30th %ile Actuated Cycle: 140.7	
10th %ile Actuated Cycle: 138.7	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 130: Great SW Pkwy

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	24	1236	72	47	1181
Future Volume (vph)	69	24	1236	72	47	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	300	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.965			0.850		
Flt Protected	0.964				0.950	
Satd. Flow (prot)	1544	0	3112	1524	1570	3112
Flt Permitted	0.964				0.098	
Satd. Flow (perm)	1544	0	3112	1524	162	3112
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	22			87		
Link Speed (mph)	30		30			30
Link Distance (ft)	676		615			670
Travel Time (s)	15.4		14.0			15.2
Peak Hour Factor	0.75	0.75	0.96	0.96	0.70	0.70
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	13%	16%	6%	15%	16%
Adj. Flow (vph)	107	37	1494	87	78	1957
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	0	1494	87	78	1957
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA	Perm	pm+pt	NA

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Protected Phases	8		2		1	6
Permitted Phases				2	6	
Detector Phase	8		2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5
Total Split (s)	22.5		43.0	43.0	9.5	52.5
Total Split (%)	30.0%		57.3%	57.3%	12.7%	70.0%
Maximum Green (s)	18.0		38.5	38.5	5.0	48.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	None	Min
Walk Time (s)	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0		0	0		0
Act Effct Green (s)	10.6		43.4	43.4	49.7	50.8
Actuated g/C Ratio	0.16		0.65	0.65	0.74	0.76
v/c Ratio	0.55		0.74	0.09	0.35	0.83
Control Delay	30.0		15.4	2.4	8.0	13.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	30.0		15.4	2.4	8.0	13.0
LOS	C		B	A	A	B
Approach Delay	30.0		14.7			12.8
Approach LOS	C		B			B
90th %ile Green (s)	16.0		38.5	38.5	5.0	48.0
90th %ile Term Code	Gap		Max	Max	Max	Max
70th %ile Green (s)	12.7		38.5	38.5	5.0	48.0
70th %ile Term Code	Gap		Max	Max	Max	Max
50th %ile Green (s)	10.6		38.5	38.5	5.0	48.0
50th %ile Term Code	Gap		Max	Max	Max	Max
30th %ile Green (s)	8.7		39.0	39.0	5.0	48.5
30th %ile Term Code	Gap		Dwell	Dwell	Max	Dwell
10th %ile Green (s)	0.0		54.0	54.0	0.0	54.0
10th %ile Term Code	Skip		Dwell	Dwell	Skip	Dwell
Queue Length 50th (ft)	47		242	0	8	262
Queue Length 95th (ft)	77		#467	19	18	270
Internal Link Dist (ft)	596		535			590
Turn Bay Length (ft)				300	300	
Base Capacity (vph)	433		2015	1017	225	2358
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.33		0.74	0.09	0.35	0.83

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 67			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 73			
70th %ile Actuated Cycle: 69.7			
50th %ile Actuated Cycle: 67.6			
30th %ile Actuated Cycle: 66.2			
10th %ile Actuated Cycle: 58.5			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 140: Bakers Ferry Rd.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	35	7	7	13	7	26	29	1073	20	66	1329	152
Future Volume (vph)	35	7	7	13	7	26	29	1073	20	66	1329	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.925			0.924			0.997			0.985	
Flt Protected	0.950				0.986		0.950			0.950		
Satd. Flow (prot)	1399	1643	0	0	1324	0	1687	4536	0	1467	4583	0
Flt Permitted	0.926				0.897		0.950			0.950		
Satd. Flow (perm)	1364	1643	0	0	1205	0	1687	4536	0	1467	4583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			40			4			38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		409			537			753			584	
Travel Time (s)		9.3			12.2			17.1			13.3	
Peak Hour Factor	0.71	0.71	0.71	0.76	0.76	0.76	0.97	0.97	0.97	0.68	0.68	0.68
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	29%	0%	14%	31%	0%	39%	7%	14%	15%	23%	12%	7%
Adj. Flow (vph)	57	11	11	20	11	40	35	1283	24	113	2267	259
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	22	0	0	71	0	35	1307	0	113	2526	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		9.6	35.4		17.0	42.8	
Total Split (%)	30.1%	30.1%		30.1%	30.1%		12.8%	47.2%		22.7%	57.1%	
Maximum Green (s)	18.1	18.1		18.1	18.1		5.1	30.9		12.5	38.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	8.5	8.5			8.2		5.2	35.7		9.6	45.6	
Actuated g/C Ratio	0.14	0.14			0.14		0.09	0.60		0.16	0.77	
v/c Ratio	0.29	0.09			0.35		0.24	0.48		0.48	0.72	
Control Delay	28.2	18.5			19.3		33.0	11.1		30.9	11.0	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	28.2	18.5			19.3		33.0	11.1		30.9	11.0	
LOS	C	B			B		C	B		C	B	
Approach Delay		25.5			19.3			11.7			11.8	
Approach LOS		C			B			B			B	
90th %ile Green (s)	12.5	12.5		12.5	12.5		5.1	30.9		12.5	38.3	
90th %ile Term Code	Gap	Gap		Hold	Hold		Max	Max		Max	Max	
70th %ile Green (s)	10.1	10.1		10.1	10.1		5.1	31.4		12.0	38.3	
70th %ile Term Code	Gap	Gap		Hold	Hold		Max	Hold		Gap	Max	
50th %ile Green (s)	8.4	8.4		8.4	8.4		0.0	27.7		10.1	42.3	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Gap		Gap	Hold	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	26.9		7.6	39.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Gap	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	53.3		0.0	53.3	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	19	4			10		12	121		37	160	
Queue Length 95th (ft)	40	16			34		41	196		65	247	
Internal Link Dist (ft)		329			457			673			504	
Turn Bay Length (ft)							300			300		
Base Capacity (vph)	426	521			404		148	2851		316	3521	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.13	0.04			0.18		0.24	0.46		0.36	0.72	

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 59.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 69.4			
70th %ile Actuated Cycle: 67			
50th %ile Actuated Cycle: 59.7			
30th %ile Actuated Cycle: 43.5			
10th %ile Actuated Cycle: 57.8			

Splits and Phases: 150: Mendel Dr./Wharton Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	0	7	4	0	14	15	1225	11	9	1415	58
Future Volume (vph)	20	0	7	4	0	14	15	1225	11	9	1415	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	250		250	200		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.966			0.928				0.850		0.994	
Flt Protected		0.964			0.977		0.950			0.950		
Satd. Flow (prot)	0	1413	0	0	1273	0	1687	4550	1404	1467	4612	0
Flt Permitted		0.800			0.864		0.950			0.950		
Satd. Flow (perm)	0	1173	0	0	1126	0	1687	4550	1404	1467	4612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			44				44		10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		720			447			1232			950	
Travel Time (s)		16.4			10.2			28.0			21.6	
Peak Hour Factor	0.57	0.57	0.57	0.25	0.75	0.75	0.91	0.91	0.91	0.73	0.73	0.73
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	29%	0%	14%	31%	0%	39%	7%	14%	15%	23%	12%	7%
Adj. Flow (vph)	41	0	14	19	0	22	19	1562	14	14	2248	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	41	0	19	1562	14	14	2340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8					2			
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	113.0	113.0	12.0	113.0	
Total Split (%)	16.7%	16.7%		16.7%	16.7%		8.0%	75.3%	75.3%	8.0%	75.3%	
Maximum Green (s)	20.5	20.5		20.5	20.5		7.5	108.5	108.5	7.5	108.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	Min	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)		8.1			8.1		7.3	123.3	123.3	7.1	128.2	
Actuated g/C Ratio		0.05			0.05		0.05	0.82	0.82	0.05	0.85	
v/c Ratio		0.53			0.40		0.23	0.42	0.01	0.20	0.59	
Control Delay		41.8			27.4		74.9	4.5	0.0	77.7	7.2	
Queue Delay		0.1			0.0		0.0	0.1	0.0	0.0	0.3	
Total Delay		41.9			27.4		74.9	4.6	0.0	77.7	7.4	
LOS		D			C		E	A	A	E	A	
Approach Delay		41.9			27.4			5.4			7.9	
Approach LOS		D			C			A			A	
90th %ile Green (s)	13.1	13.1		13.1	13.1		9.5	114.2	114.2	9.2	113.9	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
70th %ile Green (s)	9.4	9.4		9.4	9.4		8.1	119.2	119.2	7.9	119.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	6.9	6.9		6.9	6.9		7.1	122.7	122.7	6.9	122.5	
50th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
30th %ile Green (s)	5.5	5.5		5.5	5.5		0.0	125.1	125.1	5.9	135.5	
30th %ile Term Code	Gap	Gap		Gap	Gap		Skip	Coord	Coord	Gap	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	135.5	135.5	5.5	145.5	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord	Coord	Gap	Coord	
Queue Length 50th (ft)		11			0		18	128	0	15	160	
Queue Length 95th (ft)		20			24		47	204	0	m11	m0	
Internal Link Dist (ft)		640			367			1152			870	
Turn Bay Length (ft)							250		250	200		
Base Capacity (vph)		198			191		90	3741	1162	77	3942	
Starvation Cap Reductn		0			0		0	0	0	0	758	
Spillback Cap Reductn		6			0		0	681	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.29			0.21		0.21	0.51	0.01	0.18	0.73	

Intersection Summary

Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 58 (39%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 45.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 160: Marvin Miller Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Future Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt												
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1863	0	1770	5085	0	1770	5085	1863
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	1863	0	0	1863	0	1770	5085	0	1770	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.85	0.85	0.85	0.92	0.88	0.92	0.47	0.88	0.92	0.53	0.73	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	0	70	0	0	695	0	432	3206	0	37	2617	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	695	0	432	3206	0	37	2617	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA			NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8								6
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	50.0	50.0		50.0	50.0		33.0	90.5		9.5	67.0	67.0
Total Split (%)	33.3%	33.3%		33.3%	33.3%		22.0%	60.3%		6.3%	44.7%	44.7%
Maximum Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		45.5			45.5		28.5	87.9		5.0	62.5	
Actuated g/C Ratio		0.30			0.30		0.19	0.59		0.03	0.42	
v/c Ratio		0.12			1.23		1.29	1.08		0.63	1.24	
Control Delay		38.7			162.0		198.8	70.5		112.2	148.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		38.7			162.0		198.8	70.5		112.2	148.2	
LOS		D			F		F	E		F	F	
Approach Delay		38.7			162.0			85.7			147.7	
Approach LOS		D			F			F			F	
90th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
90th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
70th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
70th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
50th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
50th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
30th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	86.0		5.0	62.5	62.5
30th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
10th %ile Green (s)	45.5	45.5		45.5	45.5		28.5	95.5		0.0	62.5	62.5
10th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Skip	Coord	Coord
Queue Length 50th (ft)		50			~837		~544	~1302		36	~1157	
Queue Length 95th (ft)		85			#1046		279	#1315		46	#855	
Internal Link Dist (ft)		669			848			870			895	
Turn Bay Length (ft)							200			300		
Base Capacity (vph)		565			565		336	2979		59	2118	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.12			1.23		1.29	1.08		0.63	1.24	

Intersection Summary

Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 58 (39%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 116.1	Intersection LOS: F
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 170: Patton Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	9	1311	4	84	1648	2	12	0	4	12	0	21
Future Volume (vph)	9	1311	4	84	1648	2	12	0	4	12	0	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.966			0.913	
Flt Protected	0.950			0.950				0.964			0.982	
Satd. Flow (prot)	1504	4427	0	902	5684	0	0	1594	0	0	939	0
Flt Permitted	0.950			0.950				0.789			0.872	
Satd. Flow (perm)	1504	4427	0	902	5684	0	0	1305	0	0	834	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								95			95	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			245			480			470	
Travel Time (s)		17.3			5.6			10.9			10.7	
Peak Hour Factor	0.95	0.95	0.95	0.79	0.79	0.79	0.77	0.77	0.77	0.72	0.72	0.72
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	20%	17%	73%	100%	15%	9%	5%	0%	29%	100%	0%	71%
Adj. Flow (vph)	11	1601	5	123	2420	3	18	0	6	19	0	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1606	0	123	2423	0	0	24	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4			8		
Detector Phase	5	2		1	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.5	62.0		35.0	87.5		23.0	23.0		23.0	23.0	
Total Split (%)	7.9%	51.7%		29.2%	72.9%		19.2%	19.2%		19.2%	19.2%	
Maximum Green (s)	5.0	57.5		30.5	83.0		18.5	18.5		18.5	18.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.5	81.2		21.5	105.6			5.8			5.8	
Actuated g/C Ratio	0.05	0.68		0.18	0.88			0.05			0.05	
v/c Ratio	0.14	0.54		0.76	0.48			0.16			0.41	
Control Delay	57.2	12.3		77.3	2.6			2.2			11.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	57.2	12.3		77.3	2.6			2.2			11.1	
LOS	E	B		E	A			A			B	
Approach Delay		12.6			6.2			2.2			11.1	
Approach LOS		B			A			A			B	
90th %ile Green (s)	8.1	68.2		31.5	91.6		6.8	6.8		6.8	6.8	
90th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	0.0	75.2		25.8	105.5		5.5	5.5		5.5	5.5	
70th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	0.0	79.4		21.6	105.5		5.5	5.5		5.5	5.5	
50th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
30th %ile Green (s)	0.0	83.6		17.4	105.5		5.5	5.5		5.5	5.5	
30th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	99.7		11.3	115.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	8	221		99	122			0			0	
Queue Length 95th (ft)	28	343		146	93			0			0	
Internal Link Dist (ft)		680			165			400			390	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	81	2996		230	5003			281			208	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.14	0.54		0.53	0.48			0.09			0.25	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 180: Commerce Cir.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1372	1717	33	0	17
Future Volume (vph)	0	1372	1717	33	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	0.86	0.86	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	6408	6389	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	6408	6389	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		245	541		662	
Travel Time (s)		5.6	12.3		15.0	
Peak Hour Factor	0.96	0.96	0.78	0.78	0.53	0.53
Growth Factor	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	0	1658	2553	49	0	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1658	2602	0	0	37
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1337	14	72	1704	1	15	0	52	1	0	0
Future Volume (vph)	6	1337	14	72	1704	1	15	0	52	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.86	0.86	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.895				
Flt Protected	0.950			0.950				0.989			0.950	
Satd. Flow (prot)	1770	6395	0	1770	6408	0	0	1649	0	0	1770	0
Flt Permitted	0.950			0.950				0.923			0.588	
Satd. Flow (perm)	1770	6395	0	1770	6408	0	0	1539	0	0	1095	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						95				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		541			537			437			323	
Travel Time (s)		12.3			12.2			9.9			7.3	
Peak Hour Factor	0.99	0.99	0.99	0.78	0.78	0.78	0.86	0.86	0.86	0.50	0.50	0.50
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	7	1567	16	107	2534	1	20	0	70	2	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1583	0	107	2535	0	0	90	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	11.0	69.0		25.0	83.0		26.0	26.0		26.0	26.0	
Total Split (%)	9.2%	57.5%		20.8%	69.2%		21.7%	21.7%		21.7%	21.7%	
Maximum Green (s)	6.5	64.5		20.5	78.5		21.5	21.5		21.5	21.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	C-Max		Min	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.1	87.1		12.6	93.6			6.8			6.8	
Actuated g/C Ratio	0.05	0.73		0.10	0.78			0.06			0.06	
v/c Ratio	0.08	0.34		0.58	0.51			0.51			0.03	
Control Delay	50.9	3.7		67.9	2.3			19.9			53.0	
Queue Delay	0.0	0.0		0.0	0.1			0.0			0.0	
Total Delay	50.9	3.7		67.9	2.4			19.9			53.0	
LOS	D	A		E	A			B			D	
Approach Delay		3.9			5.1			19.9			53.0	
Approach LOS		A			A			B			D	
90th %ile Green (s)	7.2	78.7		17.4	88.9		10.4	10.4		10.4	10.4	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	6.4	84.7		14.6	92.9		7.2	7.2		7.2	7.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	5.9	88.3		12.6	95.0		5.6	5.6		5.6	5.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Hold	Hold	
30th %ile Green (s)	5.5	90.4		10.6	95.5		5.5	5.5		5.5	5.5	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	5.5	93.3		7.7	95.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	6	15		83	56			0			2	
Queue Length 95th (ft)	m11	59		m107	m86			42			6	
Internal Link Dist (ft)		461			457			357			243	
Turn Bay Length (ft)	300			150								
Base Capacity (vph)	97	4641		302	4996			353			196	
Starvation Cap Reductn	0	0		0	744			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.07	0.34		0.35	0.60			0.25			0.01	

Intersection Summary

Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 111 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: Shirley Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	326	0	373	0	0	0	0	792	1211	579	1548	0
Future Volume (vph)	326	0	373	0	0	0	0	792	1211	579	1548	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	225		0	0		0
Storage Lanes	2		1	0		0	0		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.88	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	3242	0	1524	0	0	0	0	5836	2538	1719	4631	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3242	0	1524	0	0	0	0	5836	2538	1719	4631	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55						838			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		758			734			537			524	
Travel Time (s)		17.2			16.7			12.2			11.9	
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.97	0.97	0.97	0.94	0.94	0.94
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	8%	2%	6%	2%	2%	2%	12%	12%	12%	5%	12%	2%
Adj. Flow (vph)	430	0	492	0	0	0	0	947	1448	715	1910	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	430	0	492	0	0	0	0	947	1448	715	1910	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1		1					2	1	1	2	
Detector Template	Left		Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20		20					100	20	20	100	
Trailing Detector (ft)	0		0					0	0	0	0	
Detector 1 Position(ft)	0		0					0	0	0	0	
Detector 1 Size(ft)	20		20					6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot		Perm					NA	Perm	Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7							2		1	6	
Permitted Phases			7						2			
Detector Phase	7		7					2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5		9.5					22.5	22.5	9.5	22.5	
Total Split (s)	32.0		32.0					42.0	42.0	46.0	88.0	
Total Split (%)	26.7%		26.7%					35.0%	35.0%	38.3%	73.3%	
Maximum Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
Yellow Time (s)	3.5		3.5					3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5					4.5	4.5	4.5	4.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Recall Mode	None		None					C-Min	C-Min	None	C-Min	
Walk Time (s)								7.0	7.0		7.0	
Flash Dont Walk (s)								11.0	11.0		11.0	
Pedestrian Calls (#/hr)								0	0		0	
Act Effct Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
Actuated g/C Ratio	0.23		0.23					0.31	0.31	0.35	0.70	
v/c Ratio	0.58		1.26					0.52	1.06	1.20	0.59	
Control Delay	44.8		170.4					26.6	54.5	138.8	7.9	
Queue Delay	0.0		0.0					0.0	17.3	0.3	0.4	
Total Delay	44.8		170.4					26.6	71.9	139.1	8.4	
LOS	D		F					C	E	F	A	
Approach Delay		111.8						53.9			44.0	
Approach LOS		F						D			D	
90th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
90th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
70th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
70th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
50th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
50th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
30th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
30th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
10th %ile Green (s)	27.5		27.5					37.5	37.5	41.5	83.5	
10th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
Queue Length 50th (ft)	153		~445					174	~426	~665	279	
Queue Length 95th (ft)	202		#637					136	#622	#905	209	
Internal Link Dist (ft)		678			654			457			444	
Turn Bay Length (ft)												
Base Capacity (vph)	742		391					1823	1369	594	3222	
Starvation Cap Reductn	0		0					0	72	25	717	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.58		1.26					0.52	1.12	1.26	0.76	

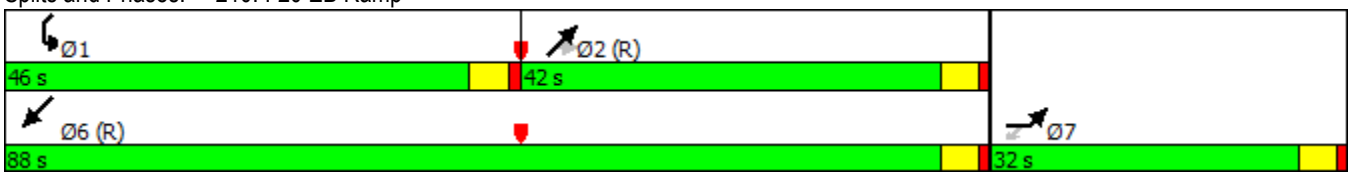
Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 13 (11%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay: 58.5		Intersection LOS: E	
Intersection Capacity Utilization 108.4%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 210: I-20 EB Ramp



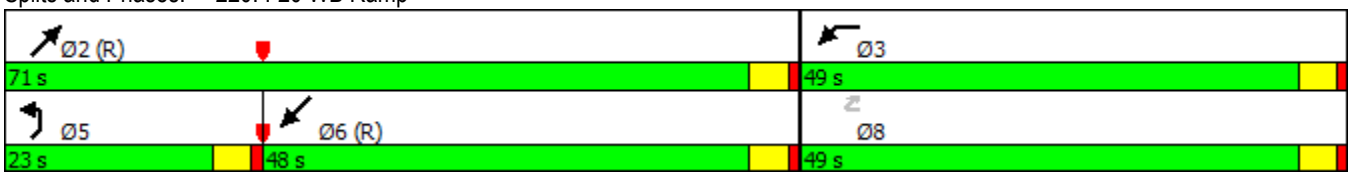
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1000	0	326	104	964	0	0	1158	192
Future Volume (vph)	0	0	0	1000	0	326	104	964	0	0	1158	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		400	0		0	0		0
Storage Lanes	0		0	3		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.91	1.00	1.00	0.86	0.86
Frt						0.850					0.979	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	4545	0	1524	1517	4715	0	0	5972	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	4545	0	1524	1517	4715	0	0	5972	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						58					39	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			795			524			744	
Travel Time (s)		11.1			18.1			11.9			16.9	
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.92	0.92	0.92	0.90	0.90	0.90
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	12%	2%	6%	19%	10%	2%	16%	8%	2%
Adj. Flow (vph)	0	0	0	1275	0	416	131	1215	0	0	1493	247
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	1275	0	416	131	1215	0	0	1740	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1		1	1	2			2	
Detector Template				Left		Right	Left	Thru			Thru	
Leading Detector (ft)				20		20	20	100			100	
Trailing Detector (ft)				0		0	0	0			0	
Detector 1 Position(ft)				0		0	0	0			0	
Detector 1 Size(ft)				20		20	20	6			6	
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0		0.0	0.0	0.0			0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type				Prot		Perm	Prot	NA			NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases				3			5	2			6	
Permitted Phases						8						
Detector Phase				3		8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0		5.0	5.0	5.0			5.0	
Minimum Split (s)				9.5		22.5	9.5	22.5			22.5	
Total Split (s)				49.0		49.0	23.0	71.0			48.0	
Total Split (%)				40.8%		40.8%	19.2%	59.2%			40.0%	
Maximum Green (s)				44.5		44.5	18.5	66.5			43.5	
Yellow Time (s)				3.5		3.5	3.5	3.5			3.5	
All-Red Time (s)				1.0		1.0	1.0	1.0			1.0	
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	
Total Lost Time (s)				4.5		4.5	4.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	
Recall Mode				None		None	None	C-Min			C-Min	
Walk Time (s)						7.0		7.0			7.0	
Flash Dont Walk (s)						11.0		11.0			11.0	
Pedestrian Calls (#/hr)						0		0			0	
Act Effct Green (s)				40.2		40.2	14.9	70.8			51.4	
Actuated g/C Ratio				0.34		0.34	0.12	0.59			0.43	
v/c Ratio				0.84		0.76	0.70	0.44			0.67	
Control Delay				42.3		39.7	58.0	6.7			25.8	
Queue Delay				0.0		0.0	0.0	0.2			0.4	
Total Delay				42.3		39.7	58.0	6.9			26.3	
LOS				D		D	E	A			C	
Approach Delay					41.7			11.9			26.3	
Approach LOS					D			B			C	
90th %ile Green (s)				44.5		44.5	18.5	66.5			43.5	
90th %ile Term Code				Max		Max	Max	Coord			Coord	
70th %ile Green (s)				43.3		43.3	18.1	67.7			45.1	
70th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
50th %ile Green (s)				41.0		41.0	15.6	70.0			49.9	
50th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
30th %ile Green (s)				38.0		38.0	13.0	73.0			55.5	
30th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
10th %ile Green (s)				34.3		34.3	9.4	76.7			62.8	
10th %ile Term Code				Gap		Hold	Gap	Coord			Coord	
Queue Length 50th (ft)				318		247	94	224			259	
Queue Length 95th (ft)				359		357	158	252			330	
Internal Link Dist (ft)		407			715			444			664	
Turn Bay Length (ft)						400						
Base Capacity (vph)				1685		601	233	2781			2578	
Starvation Cap Reductn				0		0	0	740			0	
Spillback Cap Reductn				6		0	0	0			359	
Storage Cap Reductn				0		0	0	0			0	
Reduced v/c Ratio				0.76		0.69	0.56	0.60			0.78	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 62 (52%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 108.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 220: I-20 WB Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	76	934	110	22	736	25	10	3	24	68	6	12
Future Volume (vph)	76	934	110	22	736	25	10	3	24	68	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.995			0.911			0.981	
Flt Protected	0.950			0.950				0.987			0.962	
Satd. Flow (prot)	1597	4658	0	1805	4614	0	0	1564	0	0	1572	0
Flt Permitted	0.273			0.187				0.914			0.733	
Satd. Flow (perm)	459	4658	0	355	4614	0	0	1448	0	0	1198	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			13			44			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		744			1498			395			449	
Travel Time (s)		16.9			34.0			9.0			10.2	
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.64	0.64	0.64	0.89	0.89	0.89
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	13%	10%	6%	0%	12%	8%	2%	2%	13%	16%	17%	2%
Adj. Flow (vph)	96	1178	139	29	970	33	18	5	44	89	8	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	1317	0	29	1003	0	0	67	0	0	113	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	37.5	37.5		37.5	37.5		22.5	22.5		22.5	22.5	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Maximum Green (s)	33.0	33.0		33.0	33.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	43.7	43.7		43.7	43.7			10.2			10.2	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.17			0.17	
v/c Ratio	0.29	0.39		0.11	0.30			0.24			0.53	
Control Delay	5.5	3.3		6.0	5.0			11.9			27.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.5	3.3		6.0	5.0			11.9			27.9	
LOS	A	A		A	A			B			C	
Approach Delay		3.4			5.1			11.9			27.9	
Approach LOS		A			A			B			C	
90th %ile Green (s)	35.8	35.8		35.8	35.8		15.2	15.2		15.2	15.2	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	38.8	38.8		38.8	38.8		12.2	12.2		12.2	12.2	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	40.8	40.8		40.8	40.8		10.2	10.2		10.2	10.2	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	42.9	42.9		42.9	42.9		8.1	8.1		8.1	8.1	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	55.5	55.5		55.5	55.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	2	5		3	63			7			33	
Queue Length 95th (ft)	m56	118		m6	m78			18			68	
Internal Link Dist (ft)		664			1418			315			369	
Turn Bay Length (ft)	150			200								
Base Capacity (vph)	334	3404		258	3361			465			369	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.29	0.39		0.11	0.30			0.14			0.31	

Intersection Summary

Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 5 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 5.3		Intersection LOS: A	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 230: Wendell Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Future Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	3034	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	3034	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			335			177			177			177
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.91	0.91	0.91	0.81	0.81	0.81	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	7%	3%	4%	10%	2%	5%	5%	12%	11%	14%	19%	5%
Adj. Flow (vph)	424	1080	1059	170	369	29	435	880	192	42	468	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	424	1080	1059	170	369	29	435	880	192	42	468	92
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	27.6	63.0	63.0	11.0	46.4	46.4	20.3	36.5	36.5	9.5	25.7	25.7
Total Split (%)	23.0%	52.5%	52.5%	9.2%	38.7%	38.7%	16.9%	30.4%	30.4%	7.9%	21.4%	21.4%
Maximum Green (s)	23.1	58.5	58.5	6.5	41.9	41.9	15.8	32.0	32.0	5.0	21.2	21.2
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	20.1	58.5	58.5	6.5	44.9	44.9	15.8	33.9	33.9	5.0	21.2	21.2
Actuated g/C Ratio	0.17	0.49	0.49	0.05	0.37	0.37	0.13	0.28	0.28	0.04	0.18	0.18
v/c Ratio	0.77	0.63	1.14	0.99	0.28	0.04	0.99	0.97	0.36	0.33	0.87	0.22
Control Delay	57.7	24.9	98.2	122.6	27.5	0.1	88.2	52.7	3.8	54.7	64.6	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	24.9	98.2	122.6	27.5	0.1	88.2	52.7	3.8	54.7	64.6	9.6
LOS	E	C	F	F	C	A	F	D	A	D	E	A
Approach Delay		60.6			54.6			56.7			55.5	
Approach LOS		E			D			E			E	
90th %ile Green (s)	23.1	58.5	58.5	6.5	41.9	41.9	15.8	32.0	32.0	5.0	21.2	21.2
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	22.7	58.5	58.5	6.5	42.3	42.3	15.8	32.0	32.0	5.0	21.2	21.2
70th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	20.7	58.5	58.5	6.5	44.3	44.3	15.8	32.0	32.0	5.0	21.2	21.2
50th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	18.6	58.5	58.5	6.5	46.4	46.4	15.8	32.0	32.0	5.0	21.2	21.2
30th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	15.5	58.5	58.5	6.5	49.5	49.5	15.8	41.5	41.5	0.0	21.2	21.2
10th %ile Term Code	Gap	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
Queue Length 50th (ft)	162	316	~819	69	105	0	140	~380	15	17	202	13
Queue Length 95th (ft)	214	388	#1078	#121	132	0	#274	#514	15	36	#281	22
Internal Link Dist (ft)		1021			1100			1418			1649	
Turn Bay Length (ft)				250		400	350			300		
Base Capacity (vph)	630	1708	928	172	1323	686	439	910	537	128	536	417
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.63	1.14	0.99	0.28	0.04	0.99	0.97	0.36	0.33	0.87	0.22

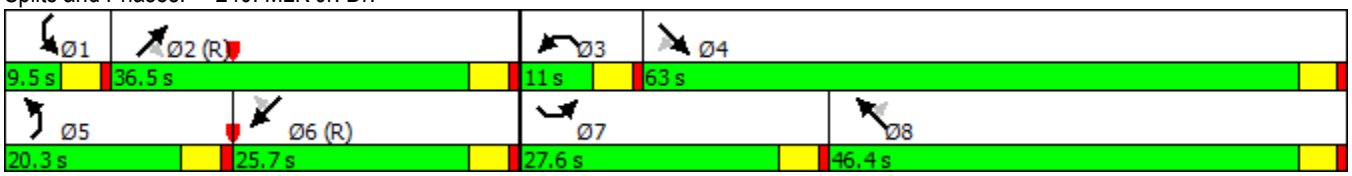
Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay: 58.3		Intersection LOS: E	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 240: MLK Jr. Dr.



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	4	4	21	45	20	63	1064	20	8	332	20
Future Volume (vph)	4	4	4	21	45	20	63	1064	20	8	332	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	150		250
Storage Lanes	0		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.954				0.850			0.850
Flt Protected		0.976		0.950			0.950			0.950		
Satd. Flow (prot)	0	1818	1583	1770	1777	0	1770	3008	1583	1770	3008	1583
Flt Permitted		0.895		0.624			0.423			0.108		
Satd. Flow (perm)	0	1667	1583	1162	1777	0	788	3008	1583	201	3008	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			95		18				95			95
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		617			886			1729			1350	
Travel Time (s)		14.0			20.1			39.3			30.7	
Peak Hour Factor	0.50	0.50	0.50	0.66	0.94	0.94	0.79	0.84	0.84	0.50	0.81	0.81
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	20%	2%	2%	20%	2%
Adj. Flow (vph)	9	9	9	37	56	25	93	1469	28	19	475	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	18	9	37	81	0	93	1469	28	19	475	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8
Detector Phase	6	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.4	23.4	23.4	9.6	33.0		9.8	77.5	77.5	9.5	77.2	77.2
Total Split (%)	19.5%	19.5%	19.5%	8.0%	27.5%		8.2%	64.6%	64.6%	7.9%	64.3%	64.3%
Maximum Green (s)	18.9	18.9	18.9	5.1	28.5		5.3	73.0	73.0	5.0	72.7	72.7
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0			0	0		0	0
Act Effct Green (s)		27.7	27.7	34.8	34.8		75.3	72.0	72.0	70.0	64.1	64.1
Actuated g/C Ratio		0.23	0.23	0.29	0.29		0.63	0.60	0.60	0.58	0.53	0.53
v/c Ratio		0.05	0.02	0.10	0.15		0.17	0.81	0.03	0.10	0.30	0.03
Control Delay		47.0	0.0	37.6	29.8		1.9	8.2	0.0	6.8	15.2	0.1
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		47.0	0.0	37.6	29.8		1.9	8.2	0.0	6.8	15.2	0.1
LOS		D	A	D	C		A	A	A	A	B	A
Approach Delay		31.3			32.3			7.7			14.1	
Approach LOS		C			C			A			B	
90th %ile Green (s)	8.9	8.9	8.9	6.2	19.6		8.3	80.7	80.7	6.2	78.6	78.6
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Gap	Gap	Gap	Gap	Hold	Hold
70th %ile Green (s)	14.7	14.7	14.7	8.4	27.6		8.1	72.8	72.8	6.1	70.8	70.8
70th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	26.7	26.7	26.7	7.2	38.4		8.1	72.6	72.6	0.0	60.0	60.0
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Skip	Hold	Hold
30th %ile Green (s)	40.9	40.9	40.9	0.0	40.9		7.4	70.1	70.1	0.0	58.2	58.2
30th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Gap	Gap	Gap	Skip	Hold	Hold
10th %ile Green (s)	47.3	47.3	47.3	0.0	47.3		6.3	63.7	63.7	0.0	52.9	52.9
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Gap	Gap	Gap	Skip	Hold	Hold
Queue Length 50th (ft)		11	0	20	34		5	47	0	6	111	0
Queue Length 95th (ft)		21	0	41	91		m3	m47	m0	5	85	0
Internal Link Dist (ft)		537			806			1649			1270	
Turn Bay Length (ft)							150			150		250
Base Capacity (vph)		424	473	370	556		556	1868	1019	194	1852	1011
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.02	0.10	0.15		0.17	0.79	0.03	0.10	0.26	0.03

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 250: Old Gordon Rd.

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	102	102	200	800	350	0
Future Volume (vph)	102	102	200	800	350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950		0.950			
Satd. Flow (prot)	902	808	950	3008	3008	1863
Flt Permitted	0.950		0.408			
Satd. Flow (perm)	902	808	408	3008	3008	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		129				
Link Speed (mph)	30			30	30	
Link Distance (ft)	912			1889	1254	
Travel Time (s)	20.7			42.9	28.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	100%	100%	90%	20%	20%	2%
Adj. Flow (vph)	129	129	252	1009	441	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	129	129	252	1009	441	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	26.0	51.0	25.0	25.0
Total Split (%)	32.0%	32.0%	34.7%	68.0%	33.3%	33.3%
Maximum Green (s)	19.5	19.5	21.5	46.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	15.0	15.0	51.0	51.0	31.6	
Actuated g/C Ratio	0.20	0.20	0.68	0.68	0.42	
v/c Ratio	0.72	0.49	0.65	0.49	0.35	
Control Delay	49.2	11.5	14.4	7.4	18.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	49.2	11.5	14.4	7.4	18.4	
LOS	D	B	B	A	B	
Approach Delay	30.4			8.8	18.4	
Approach LOS	C			A	B	
90th %ile Green (s)	19.5	19.5	21.5	46.5	20.5	20.5
90th %ile Term Code	Max	Max	Max	Coord	Coord	Coord
70th %ile Green (s)	19.1	19.1	19.3	46.9	23.1	23.1
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	15.9	15.9	14.7	50.1	30.9	30.9
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	12.6	12.6	11.2	53.4	37.7	37.7
30th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
10th %ile Green (s)	7.7	7.7	7.9	58.3	45.9	45.9
10th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
Queue Length 50th (ft)	56	0	45	104	72	
Queue Length 95th (ft)	108	42	103	172	136	
Internal Link Dist (ft)	832			1809	1174	
Turn Bay Length (ft)						
Base Capacity (vph)	234	305	432	2047	1268	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.55	0.42	0.58	0.49	0.35	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	

Actuated Cycle Length: 75	
Offset: 64 (85%), Referenced to phase 2:NETL and 6:SWT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 41.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 270: Fulton Ind. Blvd & UPS Drive

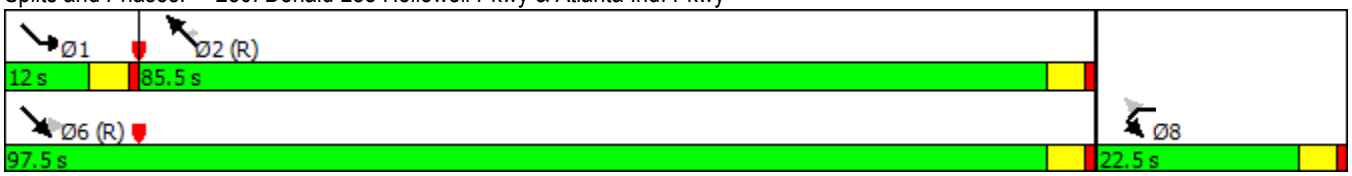
Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	45	0	99	1533	741	0
Future Volume (vph)	45	0	99	1533	741	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300			0
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1863	1570	3139	3139	1652
Flt Permitted	0.950		0.270			
Satd. Flow (perm)	1770	1863	446	3139	3139	1652
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1300			1130	416	
Travel Time (s)	29.5			25.7	9.5	
Peak Hour Factor	0.72	0.72	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	15%	15%	15%	15%
Adj. Flow (vph)	73	0	125	1933	934	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	125	1933	934	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm

Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Protected Phases	8		1	6	2	
Permitted Phases		8	6			2
Detector Phase	8	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	12.0	97.5	85.5	85.5
Total Split (%)	18.8%	18.8%	10.0%	81.3%	71.3%	71.3%
Maximum Green (s)	18.0	18.0	7.5	93.0	81.0	81.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	10.3		102.9	103.8	91.2	
Actuated g/C Ratio	0.09		0.86	0.86	0.76	
v/c Ratio	0.48		0.28	0.71	0.39	
Control Delay	62.2		3.4	6.0	2.9	
Queue Delay	0.4		0.0	0.5	0.1	
Total Delay	62.6		3.4	6.5	3.0	
LOS	E		A	A	A	
Approach Delay	62.6			6.3	3.0	
Approach LOS	E			A	A	
90th %ile Green (s)	14.3	14.3	8.9	96.7	83.3	83.3
90th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
70th %ile Green (s)	12.0	12.0	7.8	99.0	86.7	86.7
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	10.3	10.3	7.1	100.7	89.1	89.1
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	8.6	8.6	6.6	102.4	91.3	91.3
30th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
10th %ile Green (s)	0.0	0.0	5.6	115.5	105.4	105.4
10th %ile Term Code	Skip	Skip	Gap	Coord	Coord	Coord
Queue Length 50th (ft)	55		13	244	60	
Queue Length 95th (ft)	80		28	399	12	
Internal Link Dist (ft)	1220			1050	336	
Turn Bay Length (ft)			300			
Base Capacity (vph)	265		455	2714	2384	
Starvation Cap Reductn	0		0	0	280	
Spillback Cap Reductn	44		0	360	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.33		0.27	0.82	0.44	

Intersection Summary

Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 62 (52%), Referenced to phase 2:NWT and 6:SETL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.71		
Intersection Signal Delay: 6.7		Intersection LOS: A
Intersection Capacity Utilization 60.8%		ICU Level of Service B
Analysis Period (min) 15		

Splits and Phases: 280: Donald Lee Hollowell Pkwy & Atlanta Ind. Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	176	1568	200	88	728	0	60	311	0	49	52	50
Future Volume (vph)	176	1568	200	88	728	0	60	311	0	49	52	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		200	300		0	300		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.930	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1570	3139	1404	1570	3139	0	1504	3008	0	1570	2919	0
Flt Permitted	0.242			0.059			0.635			0.253		
Satd. Flow (perm)	400	3139	1404	97	3139	0	1005	3008	0	418	2919	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214								74	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			899			1051			1138	
Travel Time (s)		9.5			20.4			23.9			25.9	
Peak Hour Factor	0.80	0.95	0.92	0.92	0.96	0.92	0.83	0.90	0.92	0.72	0.72	0.78
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	20%	20%	20%	15%	15%	15%
Adj. Flow (vph)	255	1915	252	111	880	0	84	401	0	79	84	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	255	1915	252	111	880	0	84	401	0	79	158	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.6	78.2	78.2	9.8	63.4		9.5	22.5		9.5	22.5	
Total Split (%)	20.5%	65.2%	65.2%	8.2%	52.8%		7.9%	18.8%		7.9%	18.8%	
Maximum Green (s)	20.1	73.7	73.7	5.3	58.9		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	84.6	75.2	75.2	74.5	68.5		21.8	17.8		21.8	17.8	
Actuated g/C Ratio	0.70	0.63	0.63	0.62	0.57		0.18	0.15		0.18	0.15	
v/c Ratio	0.63	0.97	0.26	0.83	0.49		0.41	0.90		0.64	0.32	
Control Delay	13.7	33.5	2.4	71.9	11.2		46.4	74.4		63.5	26.0	
Queue Delay	0.1	14.9	0.4	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.8	48.4	2.8	71.9	11.2		46.4	74.4		63.5	26.0	
LOS	B	D	A	E	B		D	E		E	C	
Approach Delay		40.0			18.0			69.5			38.5	
Approach LOS		D			B			E			D	
90th %ile Green (s)	17.3	73.7	73.7	5.3	61.7		5.0	18.0		5.0	18.0	
90th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
70th %ile Green (s)	14.1	73.7	73.7	5.3	64.9		5.0	18.0		5.0	18.0	
70th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
50th %ile Green (s)	12.5	73.7	73.7	5.3	66.5		5.0	18.0		5.0	18.0	
50th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
30th %ile Green (s)	11.1	73.7	73.7	5.3	67.9		5.0	18.0		5.0	18.0	
30th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Max		Max	Hold	
10th %ile Green (s)	8.0	81.0	81.0	8.6	81.6		0.0	16.9		0.0	16.9	
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Skip	Gap		Skip	Hold	
Queue Length 50th (ft)	42	733	12	47	93		53	162		50	30	
Queue Length 95th (ft)	90	#941	m34	#165	253		92	#252		74	44	
Internal Link Dist (ft)		336			819			971			1058	
Turn Bay Length (ft)	200		200	300			300			200		
Base Capacity (vph)	481	1965	959	133	1792		203	451		124	500	
Starvation Cap Reductn	8	113	348	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.54	1.03	0.41	0.83	0.49		0.41	0.89		0.64	0.32	

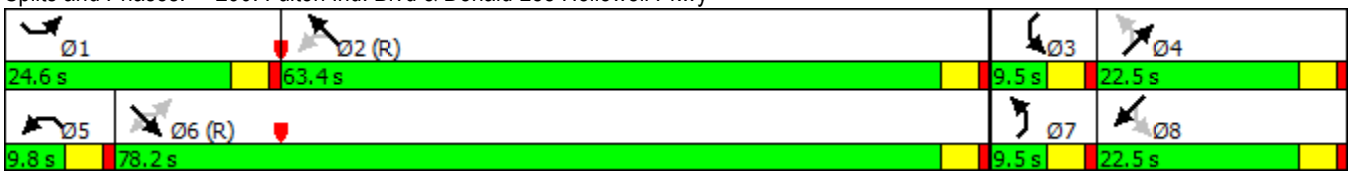
Intersection Summary

Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 54 (45%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 38.1	Intersection LOS: D
Intersection Capacity Utilization 85.1%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 290: Fulton Ind. Blvd & Donald Lee Hollowell Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	8	1234	31	38	1038	14	13	31	62	18	14	12
Future Volume (vph)	8	1234	31	38	1038	14	13	31	62	18	14	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.998			0.921			0.964	
Flt Protected	0.950			0.950				0.994			0.980	
Satd. Flow (prot)	1444	3082	0	1719	3191	0	0	1696	0	0	1699	0
Flt Permitted	0.163			0.131				0.963			0.571	
Satd. Flow (perm)	248	3082	0	237	3191	0	0	1643	0	0	990	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2			50			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		899			304			783			722	
Travel Time (s)		20.4			6.9			17.8			16.4	
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.93	0.93	0.93	0.72	0.72	0.72
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	25%	17%	3%	5%	13%	7%	2%	2%	3%	11%	2%	2%
Adj. Flow (vph)	9	1461	37	52	1417	19	16	39	77	29	23	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1498	0	52	1436	0	0	132	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	

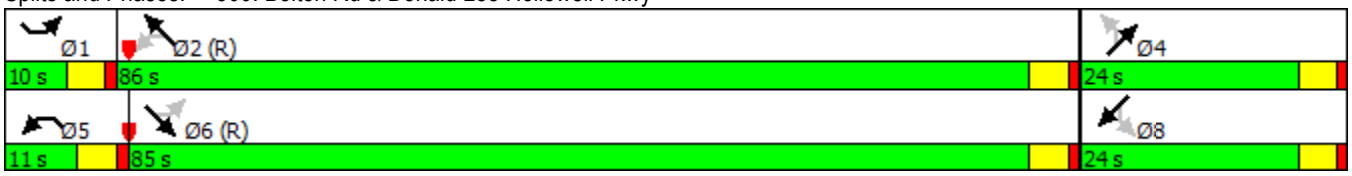
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	10.0	85.0		11.0	86.0		24.0	24.0		24.0	24.0	
Total Split (%)	8.3%	70.8%		9.2%	71.7%		20.0%	20.0%		20.0%	20.0%	
Maximum Green (s)	5.5	80.5		6.5	81.5		19.5	19.5		19.5	19.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	95.4	90.8		98.8	97.4			11.5			11.5	
Actuated g/C Ratio	0.80	0.76		0.82	0.81			0.10			0.10	
v/c Ratio	0.04	0.64		0.19	0.55			0.65			0.67	
Control Delay	1.4	5.0		3.3	6.6			46.5			70.5	
Queue Delay	0.0	0.4		0.0	0.4			0.9			1.5	
Total Delay	1.4	5.4		3.3	7.0			47.5			72.0	
LOS	A	A		A	A			D			E	
Approach Delay		5.3			6.9			47.5			72.0	
Approach LOS		A			A			D			E	
90th %ile Green (s)	6.0	81.9		7.1	83.0		17.5	17.5		17.5	17.5	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	0.0	86.1		6.5	97.1		13.9	13.9		13.9	13.9	
70th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	88.9		6.1	99.5		11.5	11.5		11.5	11.5	
50th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	91.6		5.8	101.9		9.1	9.1		9.1	9.1	
30th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	105.5		0.0	105.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Skip	Coord		Skip	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	1	160		2	25			61			44	
Queue Length 95th (ft)	m1	m9		m12	m526			122			69	
Internal Link Dist (ft)		819			224			703			642	
Turn Bay Length (ft)	400			150								
Base Capacity (vph)	253	2333		276	2590			308			171	
Starvation Cap Reductn	0	0		0	565			0			0	
Spillback Cap Reductn	0	323		0	0			53			29	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.04	0.75		0.19	0.71			0.52			0.50	

Intersection Summary

Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 68 (57%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 300: Bolton Rd & Donald Lee Hollowell Pkwy



Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	0	0	0	843	526	158	636	0	76	0	419
Future Volume (vph)	0	0	0	843	526	158	636	0	76	0	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00
Frt				0.942							0.850
Flt Protected						0.950			0.950		
Satd. Flow (prot)	0	0	0	3012	0	1262	3252	0	2736	0	1417
Flt Permitted						0.061			0.950		
Satd. Flow (perm)	0	0	0	3012	0	81	3252	0	2736	0	1417
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				165							240
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	922			304			568			593	
Travel Time (s)	21.0			6.9			12.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.87	0.87	0.87
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	11%	16%	43%	11%	2%	28%	2%	14%
Adj. Flow (vph)	0	0	0	1063	663	191	769	0	101	0	559
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	0	1726	0	191	769	0	101	0	559
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			24			24			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors				2		1	2		1		1
Detector Template				Thru		Left	Thru		Left		Right
Leading Detector (ft)				100		20	100		20		20
Trailing Detector (ft)				0		0	0		0		0
Detector 1 Position(ft)				0		0	0		0		0
Detector 1 Size(ft)				6		20	6		20		20
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type				NA		pm+pt	NA		Prot		Perm
Protected Phases				6		5	2		3		
Permitted Phases						2					8
Detector Phase				6		5	2		3		8

Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Switch Phase											
Minimum Initial (s)				5.0		5.0	5.0		5.0		5.0
Minimum Split (s)				22.5		9.5	22.5		9.5		22.5
Total Split (s)				65.6		18.4	84.0		36.0		36.0
Total Split (%)				54.7%		15.3%	70.0%		30.0%		30.0%
Maximum Green (s)				61.1		13.9	79.5		31.5		31.5
Yellow Time (s)				3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)				0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)				4.5		4.5	4.5		4.5		4.5
Lead/Lag				Lag		Lead					
Lead-Lag Optimize?				Yes		Yes					
Vehicle Extension (s)				3.0		3.0	3.0		3.0		3.0
Recall Mode				C-Min		None	C-Min		None		None
Walk Time (s)				7.0			7.0				7.0
Flash Dont Walk (s)				11.0			11.0				11.0
Pedestrian Calls (#/hr)				0			0				0
Act Effct Green (s)				61.1		79.5	79.5		31.5		31.5
Actuated g/C Ratio				0.51		0.66	0.66		0.26		0.26
v/c Ratio				1.07		1.01	0.36		0.14		1.02
Control Delay				60.1		99.7	6.9		34.6		69.2
Queue Delay				0.5		0.0	0.0		0.0		9.9
Total Delay				60.7		99.7	7.0		34.6		79.1
LOS				E		F	A		C		E
Approach Delay				60.7			25.4			72.3	
Approach LOS				E			C			E	
90th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
90th %ile Term Code				Coord		Max	Coord		Hold		Max
70th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
70th %ile Term Code				Coord		Max	Coord		Hold		Max
50th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
50th %ile Term Code				Coord		Max	Coord		Hold		Max
30th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
30th %ile Term Code				Coord		Max	Coord		Hold		Max
10th %ile Green (s)				61.1		13.9	79.5		31.5		31.5
10th %ile Term Code				Coord		Max	Coord		Hold		Max
Queue Length 50th (ft)				~736		~123	143		30		~311
Queue Length 95th (ft)				#871		m#237	127		52		#497
Internal Link Dist (ft)	842			224			488			513	
Turn Bay Length (ft)											
Base Capacity (vph)				1614		190	2154		718		548
Starvation Cap Reductn				2		0	0		0		0
Spillback Cap Reductn				0		0	228		0		16
Storage Cap Reductn				0		0	0		0		0
Reduced v/c Ratio				1.07		1.01	0.40		0.14		1.05

Intersection Summary	
Area Type:	Other
Cycle Length: 120	

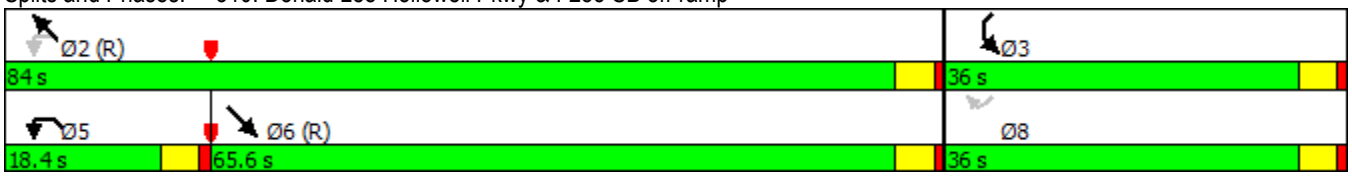
Actuated Cycle Length: 120	
Offset: 62 (52%), Referenced to phase 2:NWTL and 6:SET, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 52.9	Intersection LOS: D
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 310: Donald Lee Hollowell Pkwy & I-285 SB off-ramp



Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (vph)	0	0	443	477	0	0	352	133	451	0	206
Future Volume (vph)	0	0	443	477	0	0	352	133	451	0	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300		0	0		0		0	0
Storage Lanes	0	0	1		0	0		0		2	1
Taper Length (ft)	25		25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00
Frt							0.959				0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1504	3167	0	0	3874	0	3127	0	1335
Flt Permitted			0.280						0.950		
Satd. Flow (perm)	0	0	443	3167	0	0	3874	0	3127	0	1335
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)							74				347
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	782			568			1114			887	
Travel Time (s)	17.8			12.9			25.3			20.2	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.90	0.83	0.83	0.83	0.94	0.94	0.94
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	20%	14%	2%	2%	24%	40%	12%	2%	21%
Adj. Flow (vph)	0	0	571	615	0	0	492	186	557	0	254
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	571	615	0	0	678	0	557	0	254
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			pm+pt	NA			NA		Prot		Perm

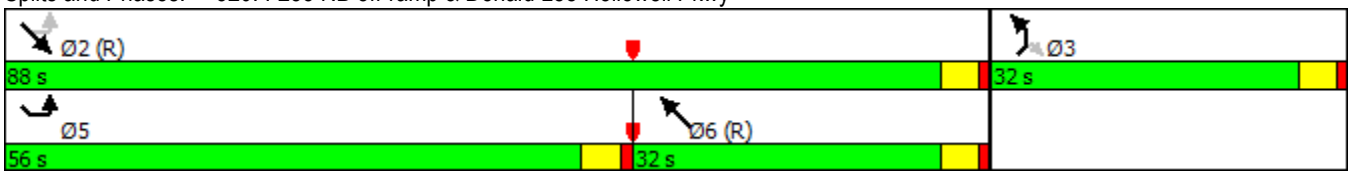
Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Protected Phases			5	2			6		3		
Permitted Phases			2								3
Detector Phase			5	2			6		3		3
Switch Phase											
Minimum Initial (s)			5.0	5.0			5.0		5.0		5.0
Minimum Split (s)			9.5	22.5			22.5		9.5		9.5
Total Split (s)			56.0	88.0			32.0		32.0		32.0
Total Split (%)			46.7%	73.3%			26.7%		26.7%		26.7%
Maximum Green (s)			51.5	83.5			27.5		27.5		27.5
Yellow Time (s)			3.5	3.5			3.5		3.5		3.5
All-Red Time (s)			1.0	1.0			1.0		1.0		1.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			4.5	4.5			4.5		4.5		4.5
Lead/Lag			Lead				Lag				
Lead-Lag Optimize?			Yes				Yes				
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			Min	C-Min			C-Min		None		None
Walk Time (s)				7.0			7.0				
Flash Dont Walk (s)				11.0			11.0				
Pedestrian Calls (#/hr)				0			0				
Act Effct Green (s)			85.6	85.6			42.0		25.4		25.4
Actuated g/C Ratio			0.71	0.71			0.35		0.21		0.21
v/c Ratio			0.86	0.27			0.48		0.84		0.46
Control Delay			14.2	1.3			31.2		57.5		3.2
Queue Delay			0.4	0.0			0.0		0.0		0.0
Total Delay			14.6	1.3			31.2		57.5		3.2
LOS			B	A			C		E		A
Approach Delay				7.7			31.2			40.5	
Approach LOS				A			C			D	
90th %ile Green (s)			51.5	83.5			27.5		27.5		27.5
90th %ile Term Code			Max	Coord			Coord		Max		Max
70th %ile Green (s)			47.8	82.8			30.5		28.2		28.2
70th %ile Term Code			Gap	Coord			Coord		Max		Max
50th %ile Green (s)			41.0	83.8			38.3		27.2		27.2
50th %ile Term Code			Gap	Coord			Coord		Gap		Gap
30th %ile Green (s)			33.2	87.0			49.3		24.0		24.0
30th %ile Term Code			Gap	Coord			Coord		Gap		Gap
10th %ile Green (s)			21.8	90.7			64.4		20.3		20.3
10th %ile Term Code			Gap	Coord			Coord		Gap		Gap
Queue Length 50th (ft)			82	10			139		210		0
Queue Length 95th (ft)			m58	m18			186		275		7
Internal Link Dist (ft)	702			488			1034			807	
Turn Bay Length (ft)			300								
Base Capacity (vph)			771	2261			1403		720		574
Starvation Cap Reductn			30	0			0		0		0
Spillback Cap Reductn			0	0			0		0		0
Storage Cap Reductn			0	0			0		0		0
Reduced v/c Ratio			0.77	0.27			0.48		0.77		0.44

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 18 (15%), Referenced to phase 2:SETL and 6:NWT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 23.6		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 320: I-285 NB off-ramp & Donald Lee Hollowell Pkwy



2031 PM Synchro Analysis Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	165	332	92	89	465	18	96	301	90	93	621	535
Future Volume (vph)	165	332	92	89	465	18	96	301	90	93	621	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	400		400	300		300
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.994				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1810	1482	1752	1761	0	1805	3438	1568	1327	2983	1468
Flt Permitted	0.111			0.324			0.223			0.407		
Satd. Flow (perm)	205	1810	1482	598	1761	0	424	3438	1568	569	2983	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116		2				115			276
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			851			3037			3592	
Travel Time (s)		18.4			19.3			69.0			81.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	3%	5%	9%	3%	7%	13%	0%	5%	3%	36%	21%	10%
Adj. Flow (vph)	208	419	116	112	586	23	121	380	113	117	783	675
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	419	116	112	609	0	121	380	113	117	783	675
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

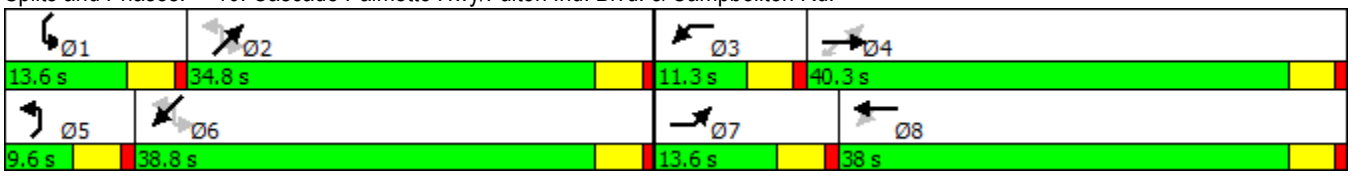
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.6	40.3	40.3	11.3	38.0		9.6	34.8	34.8	13.6	38.8	38.8
Total Split (%)	13.6%	40.3%	40.3%	11.3%	38.0%		9.6%	34.8%	34.8%	13.6%	38.8%	38.8%
Maximum Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	45.0	35.9	35.9	40.2	33.5		35.8	30.7	30.7	43.0	34.3	34.3
Actuated g/C Ratio	0.45	0.36	0.36	0.40	0.34		0.36	0.31	0.31	0.43	0.34	0.34
v/c Ratio	0.90	0.65	0.19	0.35	1.03		0.55	0.36	0.20	0.38	0.77	0.99
Control Delay	60.5	32.4	5.1	18.6	79.1		28.4	28.3	5.8	21.2	35.2	52.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	32.4	5.1	18.6	79.1		28.4	28.3	5.8	21.2	35.2	52.1
LOS	E	C	A	B	E		C	C	A	C	D	D
Approach Delay		36.0			69.7			24.2			41.4	
Approach LOS		D			E			C			D	
90th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
70th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
50th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
30th %ile Green (s)	9.1	35.8	35.8	6.8	33.5		5.1	30.3	30.3	9.1	34.3	34.3
30th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Max	Max	Max
10th %ile Green (s)	9.1	36.2	36.2	6.4	33.5		5.1	32.5	32.5	6.9	34.3	34.3
10th %ile Term Code	Max	Hold	Hold	Gap	Max		Max	Hold	Hold	Gap	Max	Max
Queue Length 50th (ft)	81	220	0	39	~418		45	99	0	45	231	285
Queue Length 95th (ft)	#216	327	36	71	#634		81	141	38	83	305	#539
Internal Link Dist (ft)		728			771			2957			3512	
Turn Bay Length (ft)	300		300	300			400		400	300		300
Base Capacity (vph)	232	649	606	319	591		222	1056	561	315	1023	684
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.65	0.19	0.35	1.03		0.55	0.36	0.20	0.37	0.77	0.99

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 43.0	Intersection LOS: D
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 100	
70th %ile Actuated Cycle: 100	
50th %ile Actuated Cycle: 100	
30th %ile Actuated Cycle: 100	
10th %ile Actuated Cycle: 100	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Cascade Palmetto Hwy/Fulton Ind. Blvd. & Campbellton Rd.



Intersection	
Int Delay, s/veh	107.1

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	79	70	16	487	16	1246	39
Future Vol, veh/h	79	70	16	487	16	1246	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	Yield
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	68	68	92	92	74	74	74
Heavy Vehicles, %	10	17	13	13	6	3	28
Mvmt Flow	135	119	20	614	25	1953	61

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2350	977	1953	0	448	-	0
Stage 1	2003	-	-	-	-	-	-
Stage 2	347	-	-	-	-	-	-
Critical Hdwy	7	7.24	4.36	-	6.52	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.6	3.47	2.33	-	2.56	-	-
Pot Cap-1 Maneuver	~ 27	224	256	-	730	-	-
Stage 1	~ 82	-	-	-	-	-	-
Stage 2	664	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 25	224	256	-	730	-	-
Mov Cap-2 Maneuver	~ 25	-	-	-	-	-	-
Stage 1	~ 82	-	-	-	-	-	-
Stage 2	612	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 1231	0.6	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	256	-	25	224	730	-	-
HCM Lane V/C Ratio	0.079	-	5.391	0.533	0.034	-	-
HCM Control Delay (s)	20.3	$	2288.1	38	10.1	-	-
HCM Lane LOS	C	-	F	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	16.7	2.8	0.1	-	-

Notes

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

Intersection	
Int Delay, s/veh	90.4

Movement	SEL	SER	NEL	NET	SWU	SWT	SWR
Lane Configurations							
Traffic Vol, veh/h	71	73	10	484	4	1369	76
Future Vol, veh/h	71	73	10	484	4	1369	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	-	None
Storage Length	0	100	150	-	150	-	150
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	58	58	85	85	93	93	93
Heavy Vehicles, %	28	10	10	16	25	5	50
Mvmt Flow	142	146	14	661	5	1708	95

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2076	854	1708	0	482	-	0
Stage 1	1718	-	-	-	-	-	-
Stage 2	358	-	-	-	-	-	-
Critical Hdwy	7.36	7.1	4.3	-	6.9	-	-
Critical Hdwy Stg 1	6.36	-	-	-	-	-	-
Critical Hdwy Stg 2	6.36	-	-	-	-	-	-
Follow-up Hdwy	3.78	3.4	2.3	-	2.75	-	-
Pot Cap-1 Maneuver	~ 34	286	334	-	621	-	-
Stage 1	~ 99	-	-	-	-	-	-
Stage 2	607	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 33	286	334	-	621	-	-
Mov Cap-2 Maneuver	~ 33	-	-	-	-	-	-
Stage 1	~ 99	-	-	-	-	-	-
Stage 2	582	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 868.7	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWU	SWT	SWR
Capacity (veh/h)	334	-	33	286	621	-	-
HCM Lane V/C Ratio	0.041	-	4.303	0.51	0.008	-	-
HCM Control Delay (s)	16.2	$	1731.1	30	10.8	-	-
HCM Lane LOS	C	-	F	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	16.8	2.7	0	-	-

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

Intersection	
Int Delay, s/veh	258

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	50	44	131	58	14	54	19	590	70	60	1086	38
Future Vol, veh/h	50	44	131	58	14	54	19	590	70	60	1086	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	300	-	200	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	91	91	91	86	86	86	89	89	89
Heavy Vehicles, %	26	0	13	7	7	4	42	12	1	2	8	40
Mvmt Flow	74	65	195	74	18	69	26	796	94	78	1415	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2030	2419	708	1744	2419	398	1415	0	0	796	0	0
Stage 1	1572	1572	-	847	847	-	-	-	-	-	-	-
Stage 2	458	847	-	897	1572	-	-	-	-	-	-	-
Critical Hdwy	8.02	6.5	7.16	7.64	6.64	6.98	4.94	-	-	4.14	-	-
Critical Hdwy Stg 1	7.02	5.5	-	6.64	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.02	5.5	-	6.64	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.76	4	3.43	3.57	4.07	3.34	2.62	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 25	~ 33	353	~ 52	30	596	316	-	-	822	-	-
Stage 1	91	172	-	313	365	-	-	-	-	-	-	-
Stage 2	493	381	-	291	161	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 8	~ 27	353	-	25	596	316	-	-	822	-	-
Mov Cap-2 Maneuver	~ 8	~ 27	-	-	25	-	-	-	-	-	-	-
Stage 1	84	156	-	287	335	-	-	-	-	-	-	-
Stage 2	379	350	-	~ 69	146	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, $	2274.1		0.5	0.5
HCM LOS	F	-		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SELn2	SWL	SWT	SWR
Capacity (veh/h)	316	-	-	-	12	353	822	-	-
HCM Lane V/C Ratio	0.081	-	-	-	11.65	0.552	0.095	-	-
HCM Control Delay (s)	17.4	-	-	$	5405.6	27.1	9.8	-	-
HCM Lane LOS	C	-	-	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	18.8	3.2	0.3	-	-

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	50	50	50	42	50	100	679	50	126	957	100
Future Volume (vph)	100	50	50	50	42	50	100	679	50	126	957	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		150
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.925			0.952			0.990				0.850
Flt Protected	0.950				0.983		0.950			0.950		
Satd. Flow (prot)	1128	1098	0	0	1482	0	1128	2978	0	1504	3008	897
Flt Permitted	0.478				0.836		0.116			0.214		
Satd. Flow (perm)	568	1098	0	0	1260	0	138	2978	0	339	3008	897
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		58			27			11				127
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		812			1105			708			889	
Travel Time (s)		18.5			25.1			16.1			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	60%	60%	60%	20%	20%	20%	60%	20%	20%	20%	20%	80%
Adj. Flow (vph)	126	63	63	63	53	63	126	856	63	159	1207	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	126	0	0	179	0	126	919	0	159	1207	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	10.0	32.5		22.5	22.5		12.0	44.9		12.6	45.5	45.5
Total Split (%)	11.1%	36.1%		25.0%	25.0%		13.3%	49.9%		14.0%	50.6%	50.6%
Maximum Green (s)	5.5	28.0		18.0	18.0		7.5	40.4		8.1	41.0	41.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		Min	Min		None	Min		None	Min	Min
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0			0	0
Act Effct Green (s)	21.8	21.8			14.3		46.3	38.5		46.6	38.7	38.7
Actuated g/C Ratio	0.27	0.27			0.17		0.56	0.47		0.57	0.47	0.47
v/c Ratio	0.67	0.38			0.74		0.74	0.65		0.52	0.85	0.26
Control Delay	44.1	17.7			47.7		43.6	20.4		14.7	27.6	4.3
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	44.1	17.7			47.7		43.6	20.4		14.7	27.6	4.3
LOS	D	B			D		D	C		B	C	A
Approach Delay		30.9			47.7			23.2			24.3	
Approach LOS		C			D			C			C	
90th %ile Green (s)	5.5	28.0		18.0	18.0		7.5	40.4		8.1	41.0	41.0
90th %ile Term Code	Max	Hold		Max	Max		Max	Max		Max	Max	Max
70th %ile Green (s)	5.5	28.0		18.0	18.0		7.5	40.4		8.1	41.0	41.0
70th %ile Term Code	Max	Hold		Max	Max		Max	Hold		Max	Max	Max
50th %ile Green (s)	5.5	26.0		16.0	16.0		7.5	40.4		8.1	41.0	41.0
50th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Max	Max
30th %ile Green (s)	5.5	22.7		12.7	12.7		7.5	39.6		8.1	40.2	40.2
30th %ile Term Code	Max	Hold		Gap	Gap		Max	Hold		Max	Gap	Gap
10th %ile Green (s)	0.0	8.1		8.1	8.1		7.5	30.3		6.5	29.3	29.3
10th %ile Term Code	Skip	Hold		Gap	Gap		Max	Hold		Gap	Gap	Gap
Queue Length 50th (ft)	55	28			80		30	199		36	302	0
Queue Length 95th (ft)	#111	75			#165		#132	279		68	#456	31
Internal Link Dist (ft)		732			1025			628			809	
Turn Bay Length (ft)							300			300		150
Base Capacity (vph)	189	422			305		170	1512		312	1544	522
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.67	0.30			0.59		0.74	0.61		0.51	0.78	0.24

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 82.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 25.9	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 90	
50th %ile Actuated Cycle: 88	
30th %ile Actuated Cycle: 83.9	
10th %ile Actuated Cycle: 58.4	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: Fulton Ind. Blvd. & Boat Rock Blvd./Boat Rock Rd.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1102	7	20	1118	31	4	0	30	32	0	7
Future Volume (vph)	9	1102	7	20	1118	31	4	0	30	32	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950				0.950		0.950		
Satd. Flow (prot)	1081	3223	1615	1289	3252	912	0	1444	1495	1347	1252	0
Flt Permitted	0.162			0.117						0.513		
Satd. Flow (perm)	184	3223	1615	159	3252	912	0	1520	1495	727	1252	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			127			127		222	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		849			1099			609			533	
Travel Time (s)		19.3			25.0			13.8			12.1	
Peak Hour Factor	0.86	0.86	0.86	0.98	0.98	0.98	0.72	0.72	0.72	0.60	0.60	0.60
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	67%	12%	0%	40%	11%	77%	25%	0%	8%	34%	0%	29%
Adj. Flow (vph)	12	1486	9	24	1323	37	6	0	48	62	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	1486	9	24	1323	37	0	6	48	62	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	9.5	48.5	48.5	9.5	48.5	48.5	9.5	22.5	22.5	9.5	22.5	
Total Split (%)	10.6%	53.9%	53.9%	10.6%	53.9%	53.9%	10.6%	25.0%	25.0%	10.6%	25.0%	
Maximum Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	5.0	18.0	18.0	5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	47.1	48.0	48.0	47.8	49.6	49.6		6.4	6.4	10.9	11.2	
Actuated g/C Ratio	0.74	0.75	0.75	0.75	0.78	0.78		0.10	0.10	0.17	0.18	
v/c Ratio	0.06	0.61	0.01	0.11	0.52	0.05		0.04	0.18	0.35	0.03	
Control Delay	4.9	10.7	0.0	5.4	7.8	0.1		33.2	1.5	31.1	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	4.9	10.7	0.0	5.4	7.8	0.1		33.2	1.5	31.1	0.1	
LOS	A	B	A	A	A	A		C	A	C	A	
Approach Delay		10.6			7.6			5.0			25.4	
Approach LOS		B			A			A			C	
90th %ile Green (s)	5.0	44.0	44.0	5.0	44.0	44.0	0.0	7.2	7.2	5.0	16.7	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Skip	Gap	Gap	Max	Hold	
70th %ile Green (s)	0.0	44.0	44.0	5.0	53.5	53.5	0.0	6.4	6.4	5.0	15.9	
70th %ile Term Code	Skip	Max	Max	Max	Hold	Hold	Skip	Gap	Gap	Max	Hold	
50th %ile Green (s)	0.0	45.8	45.8	0.0	45.8	45.8	0.0	5.8	5.8	5.0	15.3	
50th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Gap	Gap	Max	Hold	
30th %ile Green (s)	0.0	46.1	46.1	0.0	46.1	46.1	0.0	0.0	0.0	0.0	0.0	
30th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
10th %ile Green (s)	0.0	35.9	35.9	0.0	35.9	35.9	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	2	184	0	3	149	0		2	0	22	0	
Queue Length 95th (ft)	6	359	0	10	317	0		11	0	37	0	
Internal Link Dist (ft)		769			1019			529			453	
Turn Bay Length (ft)	300		300	300		300						
Base Capacity (vph)	211	2430	1249	214	2531	738		460	541	176	534	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.06	0.61	0.01	0.11	0.52	0.05		0.01	0.09	0.35	0.03	

Intersection Summary

Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 63.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 79.2			
70th %ile Actuated Cycle: 78.4			
50th %ile Actuated Cycle: 70.1			
30th %ile Actuated Cycle: 50.6			
10th %ile Actuated Cycle: 40.4			

Splits and Phases: 70: Lakeview Ct. & Fulton Ind. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	883	100	245	769	230	300	610	100	101	300	185
Future Volume (vph)	213	883	100	245	769	230	300	610	100	101	300	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	350		300	350		300	300		300
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			205			206			143			263
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1099			761			631			649	
Travel Time (s)		25.0			17.3			14.3			14.8	
Peak Hour Factor	0.79	0.93	0.92	0.81	0.91	0.92	0.91	0.91	0.91	0.81	0.81	0.81
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	313	1101	126	351	980	290	382	778	127	145	430	265
Shared Lane Traffic (%)												
Lane Group Flow (vph)	313	1101	126	351	980	290	382	778	127	145	430	265
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

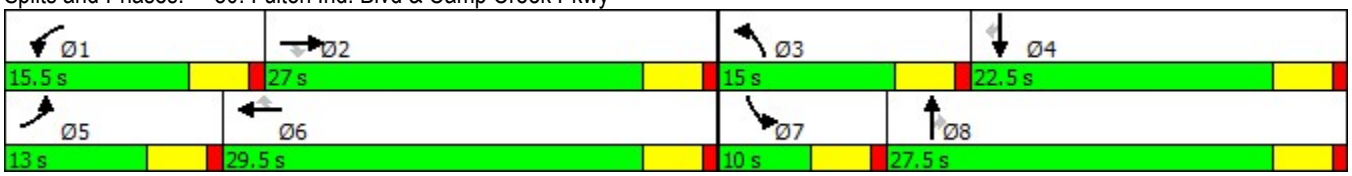
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	27.0	27.0	15.5	29.5	29.5	15.0	27.5	27.5	10.0	22.5	22.5
Total Split (%)	16.3%	33.8%	33.8%	19.4%	36.9%	36.9%	18.8%	34.4%	34.4%	12.5%	28.1%	28.1%
Maximum Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.5	22.3	22.3	10.7	24.5	24.5	10.5	21.4	21.4	5.5	16.4	16.4
Actuated g/C Ratio	0.11	0.29	0.29	0.14	0.31	0.31	0.13	0.27	0.27	0.07	0.21	0.21
v/c Ratio	0.84	0.76	0.21	0.75	0.88	0.45	0.83	0.80	0.24	0.60	0.58	0.49
Control Delay	55.9	29.7	1.4	43.8	36.7	9.5	50.3	33.5	4.6	47.1	31.1	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.9	29.7	1.4	43.8	36.7	9.5	50.3	33.5	4.6	47.1	31.1	7.2
LOS	E	C	A	D	D	A	D	C	A	D	C	A
Approach Delay		32.7			33.4			35.6			26.3	
Approach LOS		C			C			D			C	
90th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
50th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	23.0	23.0	5.5	18.0	18.0
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Hold	Hold
30th %ile Green (s)	8.5	22.5	22.5	11.0	25.0	25.0	10.5	21.6	21.6	5.5	16.6	16.6
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Gap	Gap	Max	Hold	Hold
10th %ile Green (s)	8.5	21.5	21.5	9.6	22.6	22.6	10.5	17.0	17.0	5.5	12.0	12.0
10th %ile Term Code	Max	Hold	Hold	Gap	Gap	Gap	Max	Gap	Gap	Max	Hold	Hold
Queue Length 50th (ft)	80	184	0	88	242	30	97	185	0	37	100	1
Queue Length 95th (ft)	#119	233	7	117	#355	93	#170	251	31	59	128	40
Internal Link Dist (ft)		1019			681			551			569	
Turn Bay Length (ft)	300		300	350		300	350		300	300		300
Base Capacity (vph)	374	1468	603	485	1135	647	462	1044	568	242	817	568
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.75	0.21	0.72	0.86	0.45	0.83	0.75	0.22	0.60	0.53	0.47

Intersection Summary

Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 78	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 32.6	Intersection LOS: C
Intersection Capacity Utilization 70.4%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 80	
70th %ile Actuated Cycle: 80	
50th %ile Actuated Cycle: 80	
30th %ile Actuated Cycle: 78.6	
10th %ile Actuated Cycle: 71.6	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 80: Fulton Ind. Blvd & Camp Creek Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Future Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		300	300		300
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1900	1568	1736	1429	1538	1641	3252	1442	1671	3252	1380
Flt Permitted	0.731			0.732			0.050			0.100		
Satd. Flow (perm)	1362	1900	1568	1337	1429	1538	86	3252	1442	176	3252	1380
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109			113			76
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		458			669			1465			1699	
Travel Time (s)		10.4			15.2			33.3			38.6	
Peak Hour Factor	0.67	0.67	0.67	0.97	0.97	0.97	0.95	0.95	0.95	0.82	0.82	0.82
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	0%	3%	4%	33%	5%	10%	11%	12%	8%	11%	17%
Adj. Flow (vph)	87	38	566	257	12	84	121	1324	140	161	2174	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	38	566	257	12	84	121	1324	140	161	2174	11
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

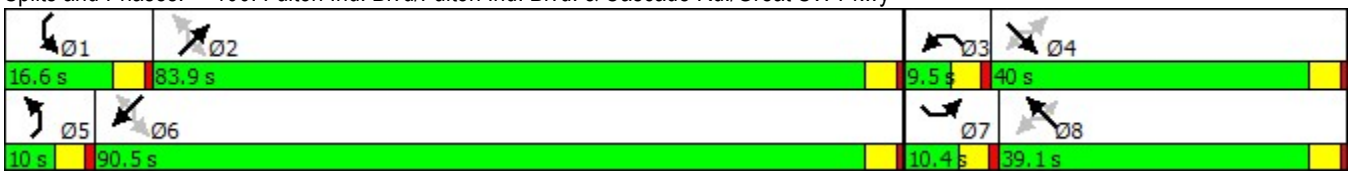
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.4	40.0	40.0	9.5	39.1	39.1	10.0	83.9	83.9	16.6	90.5	90.5
Total Split (%)	6.9%	26.7%	26.7%	6.3%	26.1%	26.1%	6.7%	55.9%	55.9%	11.1%	60.3%	60.3%
Maximum Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	79.4	79.4	12.1	86.0	86.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	41.4	35.5	35.5	39.6	34.6	34.6	86.1	80.6	80.6	95.7	86.0	86.0
Actuated g/C Ratio	0.28	0.24	0.24	0.26	0.23	0.23	0.57	0.54	0.54	0.64	0.57	0.57
v/c Ratio	0.22	0.08	1.25	0.70	0.04	0.19	1.14	0.76	0.17	0.73	1.17	0.01
Control Delay	41.0	45.4	165.7	59.7	45.4	4.5	161.6	30.8	5.1	36.0	111.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	45.4	165.7	59.7	45.4	4.5	161.6	30.8	5.1	36.0	111.9	0.0
LOS	D	D	F	E	D	A	F	C	A	D	F	A
Approach Delay		143.4			46.1			38.5			106.2	
Approach LOS		F			D			D			F	
90th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	79.4	79.4	12.1	86.0	86.0
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	79.4	79.4	12.1	86.0	86.0
70th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	80.0	80.0	11.5	86.0	86.0
50th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
30th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	81.3	81.3	10.2	86.0	86.0
30th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
10th %ile Green (s)	5.9	35.5	35.5	5.0	34.6	34.6	5.5	83.0	83.0	8.5	86.0	86.0
10th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
Queue Length 50th (ft)	63	29	~604	208	9	0	~91	522	12	59	~1325	0
Queue Length 95th (ft)	80	46	#485	298	28	26	#231	622	48	110	#1237	0
Internal Link Dist (ft)		378			589			1385			1619	
Turn Bay Length (ft)							300		300	300		300
Base Capacity (vph)	391	449	454	366	329	438	106	1747	827	233	1864	823
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.08	1.25	0.70	0.04	0.19	1.14	0.76	0.17	0.69	1.17	0.01

Intersection Summary

Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 85.5	Intersection LOS: F
Intersection Capacity Utilization 97.8%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 150	
70th %ile Actuated Cycle: 150	
50th %ile Actuated Cycle: 150	
30th %ile Actuated Cycle: 150	
10th %ile Actuated Cycle: 150	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Fulton Ind. Blvd/Fulton Ind. Blvd. & Cascade Rd./Great SW Pkwy



Intersection	
Int Delay, s/veh	787.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	47	43	0	156	22	1191	17	67	1222	10
Future Vol, veh/h	31	0	47	43	0	156	22	1191	17	67	1222	10
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	46	46	46	82	82	82	97	97	97	84	84	84
Heavy Vehicles, %	0	0	9	5	0	10	33	9	53	30	11	20
Mvmt Flow	78	0	119	61	0	221	26	1424	20	93	1688	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2638	3350	844	2506	3350	712	1688	0	-	1424	0	0
Stage 1	1873	1873	-	1477	1477	-	-	-	-	-	-	-
Stage 2	765	1477	-	1029	1873	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7.08	7.6	6.5	7.1	4.76	-	-	4.7	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.39	3.55	4	3.4	2.53	-	-	2.5	-	-
Pot Cap-1 Maneuver	~ 12	8	293	~ 14	8	357	261	-	0	353	-	-
Stage 1	~ 76	122	-	128	192	-	-	-	0	-	-	-
Stage 2	366	192	-	245	122	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	~ 3	5	293	~ 6	5	357	261	-	-	353	-	-
Mov Cap-2 Maneuver	~ 3	5	-	~ 6	5	-	-	-	-	-	-	-
Stage 1	~ 68	90	-	115	173	-	-	-	-	-	-	-
Stage 2	126	173	-	107	90	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 13225.8	$ 1168.9	0.4	1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	261	-	7	6	357	353	-	-
HCM Lane V/C Ratio	0.101	-	28.099	10.138	0.618	0.262	-	-
HCM Control Delay (s)	20.3	$ 13225.8	$ 5300.2	$ 5300.2	30.1	18.8	-	-
HCM Lane LOS	C	-	F	F	D	C	-	-
HCM 95th %tile Q(veh)	0.3	-	26.5	9.3	3.9	1	-	-

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1278	0	100	1250	0	50	14	0	50	106	0
Future Volume (vph)	100	1278	0	100	1250	0	50	14	0	50	106	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		250	300		300	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt												
Flt Protected	0.950			0.950				0.963			0.984	
Satd. Flow (prot)	1770	3539	1863	1770	3539	1863	0	3408	0	0	3483	0
Flt Permitted	0.088			0.082				0.690			0.835	
Satd. Flow (perm)	164	3539	1863	153	3539	1863	0	2442	0	0	2955	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		642			731			251			574	
Travel Time (s)		14.6			16.6			5.7			13.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	126	1611	0	126	1576	0	63	18	0	63	134	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	1611	0	126	1576	0	0	81	0	0	197	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	14.8	62.5	62.5	15.0	62.7	62.7	22.5	22.5		22.5	22.5	
Total Split (%)	14.8%	62.5%	62.5%	15.0%	62.7%	62.7%	22.5%	22.5%		22.5%	22.5%	
Maximum Green (s)	10.3	58.0	58.0	10.5	58.2	58.2	18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5		4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	
Act Effct Green (s)	55.2	49.0		55.1	48.9			11.2			11.2	
Actuated g/C Ratio	0.70	0.62		0.70	0.62			0.14			0.14	
v/c Ratio	0.45	0.74		0.47	0.72			0.23			0.47	
Control Delay	13.8	14.3		15.5	13.9			36.1			38.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	13.8	14.3		15.5	13.9			36.1			38.4	
LOS	B	B		B	B			D			D	
Approach Delay		14.3			14.0			36.1			38.4	
Approach LOS		B			B			D			D	
90th %ile Green (s)	10.3	58.0	58.0	10.5	58.2	58.2	15.2	15.2		15.2	15.2	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Hold	Hold		Gap	Gap	
70th %ile Green (s)	9.1	58.0	58.0	9.5	58.4	58.4	13.0	13.0		13.0	13.0	
70th %ile Term Code	Gap	Max	Max	Gap	Hold	Hold	Hold	Hold		Gap	Gap	
50th %ile Green (s)	7.7	50.0	50.0	7.4	49.7	49.7	11.3	11.3		11.3	11.3	
50th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Hold	Hold		Gap	Gap	
30th %ile Green (s)	7.0	41.3	41.3	6.5	40.8	40.8	9.4	9.4		9.4	9.4	
30th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	35.7	35.7	0.0	35.7	35.7	7.4	7.4		7.4	7.4	
10th %ile Term Code	Skip	Dwell	Dwell	Skip	Dwell	Dwell	Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	14	283		14	275			20			50	
Queue Length 95th (ft)	62	451		66	430			45			94	
Internal Link Dist (ft)		562			651			171			494	
Turn Bay Length (ft)	300			300								
Base Capacity (vph)	337	2647		335	2655			583			706	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.37	0.61		0.38	0.59			0.14			0.28	

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 79.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 15.9	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 97.2	
70th %ile Actuated Cycle: 94	
50th %ile Actuated Cycle: 82.2	
30th %ile Actuated Cycle: 70.7	
10th %ile Actuated Cycle: 52.1	

Splits and Phases: 130: Great SW Pkwy

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	99	41	1574	125	15	1069
Future Volume (vph)	99	41	1574	125	15	1069
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	300	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.960			0.850		
Flt Protected	0.966				0.950	
Satd. Flow (prot)	1593	0	3343	1553	1327	3139
Flt Permitted	0.966				0.060	
Satd. Flow (perm)	1593	0	3343	1553	84	3139
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	18			153		
Link Speed (mph)	30		30			30
Link Distance (ft)	676		615			670
Travel Time (s)	15.4		14.0			15.2
Peak Hour Factor	0.70	0.70	0.95	0.95	0.90	0.90
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	8%	17%	8%	4%	36%	15%
Adj. Flow (vph)	164	68	1922	153	19	1378
Shared Lane Traffic (%)						
Lane Group Flow (vph)	232	0	1922	153	19	1378
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA	Perm	pm+pt	NA

Lane Group	NBL	NBR	NET	NER	SWL	SWT
Protected Phases	8		2		1	6
Permitted Phases				2	6	
Detector Phase	8		2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5
Total Split (s)	22.6		67.9	67.9	9.5	77.4
Total Split (%)	22.6%		67.9%	67.9%	9.5%	77.4%
Maximum Green (s)	18.1		63.4	63.4	5.0	72.9
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	None	Min
Walk Time (s)	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0		0	0		0
Act Effct Green (s)	16.2		62.6	62.6	66.0	66.0
Actuated g/C Ratio	0.18		0.69	0.69	0.72	0.72
v/c Ratio	0.78		0.84	0.14	0.15	0.61
Control Delay	53.5		16.7	1.5	6.2	7.8
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	53.5		16.7	1.5	6.2	7.8
LOS	D		B	A	A	A
Approach Delay	53.5		15.5			7.7
Approach LOS	D		B			A
90th %ile Green (s)	18.1		63.4	63.4	5.0	72.9
90th %ile Term Code	Max		Max	Max	Max	Hold
70th %ile Green (s)	18.1		63.4	63.4	5.0	72.9
70th %ile Term Code	Max		Max	Max	Max	Hold
50th %ile Green (s)	18.1		63.6	63.6	0.0	63.6
50th %ile Term Code	Max		Dwell	Dwell	Skip	Dwell
30th %ile Green (s)	15.5		65.6	65.6	0.0	65.6
30th %ile Term Code	Gap		Dwell	Dwell	Skip	Dwell
10th %ile Green (s)	11.5		55.0	55.0	0.0	55.0
10th %ile Term Code	Gap		Dwell	Dwell	Skip	Dwell
Queue Length 50th (ft)	115		348	0	3	189
Queue Length 95th (ft)	157		#648	22	9	243
Internal Link Dist (ft)	596		535			590
Turn Bay Length (ft)				300	300	
Base Capacity (vph)	333		2364	1143	129	2533
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.70		0.81	0.13	0.15	0.54

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 91.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 100	
70th %ile Actuated Cycle: 100	
50th %ile Actuated Cycle: 90.7	
30th %ile Actuated Cycle: 90.1	
10th %ile Actuated Cycle: 75.5	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 140: Bakers Ferry Rd.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	134	14	38	28	8	55	22	1592	13	57	998	50
Future Volume (vph)	134	14	38	28	8	55	22	1592	13	57	998	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	300		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.890			0.919			0.999			0.993	
Flt Protected	0.950				0.985		0.950			0.950		
Satd. Flow (prot)	1626	1446	0	0	1520	0	1357	4840	0	1687	4477	0
Flt Permitted	0.652				0.893		0.950			0.950		
Satd. Flow (perm)	1116	1446	0	0	1378	0	1357	4840	0	1687	4477	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			79			2			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		409			537			753			584	
Travel Time (s)		9.3			12.2			17.1			13.3	
Peak Hour Factor	0.60	0.60	0.60	0.80	0.80	0.80	0.96	0.96	0.96	0.94	0.94	0.94
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	11%	14%	18%	14%	38%	9%	33%	7%	15%	7%	15%	16%
Adj. Flow (vph)	259	27	73	41	12	80	27	1924	16	70	1232	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	259	100	0	0	133	0	27	1940	0	70	1294	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	36.0	36.0		36.0	36.0		12.0	52.0		12.0	52.0	
Total Split (%)	36.0%	36.0%		36.0%	36.0%		12.0%	52.0%		12.0%	52.0%	
Maximum Green (s)	31.5	31.5		31.5	31.5		7.5	47.5		7.5	47.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	25.2	25.2			25.2		6.9	45.6		7.3	50.2	
Actuated g/C Ratio	0.28	0.28			0.28		0.08	0.51		0.08	0.56	
v/c Ratio	0.82	0.22			0.30		0.26	0.78		0.51	0.51	
Control Delay	53.1	11.0			14.0		49.7	22.2		57.3	14.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	53.1	11.0			14.0		49.7	22.2		57.3	14.5	
LOS	D	B			B		D	C		E	B	
Approach Delay		41.4			14.0			22.6			16.7	
Approach LOS		D			B			C			B	
90th %ile Green (s)	31.5	31.5		31.5	31.5		7.5	47.5		7.5	47.5	
90th %ile Term Code	Max	Max		Hold	Hold		Max	Max		Max	Max	
70th %ile Green (s)	31.5	31.5		31.5	31.5		7.5	47.5		7.5	47.5	
70th %ile Term Code	Max	Max		Hold	Hold		Max	Max		Max	Hold	
50th %ile Green (s)	27.7	27.7		27.7	27.7		0.0	47.5		7.5	59.5	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Max	Hold	
30th %ile Green (s)	22.4	22.4		22.4	22.4		0.0	47.5		7.5	59.5	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Max	Hold	
10th %ile Green (s)	14.4	14.4		14.4	14.4		0.0	34.4		0.0	34.4	
10th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	147	12			24		16	351		42	141	
Queue Length 95th (ft)	141	21			57		44	453		#100	260	
Internal Link Dist (ft)		329			457			673			504	
Turn Bay Length (ft)							300			300		
Base Capacity (vph)	412	580			559		119	2699		148	2729	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.63	0.17			0.24		0.23	0.72		0.47	0.47	

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 89	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 66.7%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 100	
70th %ile Actuated Cycle: 100	
50th %ile Actuated Cycle: 96.2	
30th %ile Actuated Cycle: 90.9	
10th %ile Actuated Cycle: 57.8	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 150: Mendel Dr./Wharton Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	41	0	9	3	0	5	17	1818	7	3	1084	21
Future Volume (vph)	41	0	9	3	0	5	17	1818	7	3	1084	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	250		250	200		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.976			0.913				0.850		0.997	
Flt Protected		0.961			0.983		0.950			0.950		
Satd. Flow (prot)	0	1411	0	0	905	0	1444	4803	868	902	4422	0
Flt Permitted		0.753			0.913		0.950			0.950		
Satd. Flow (perm)	0	1106	0	0	841	0	1444	4803	868	902	4422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		65			65				65		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		720			447			1232			950	
Travel Time (s)		16.4			10.2			28.0			21.6	
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.96	0.96	0.96	0.85	0.85	0.85
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	29%	0%	14%	67%	0%	100%	25%	8%	86%	100%	17%	14%
Adj. Flow (vph)	64	0	14	6	0	11	21	2197	8	4	1479	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	0	0	17	0	21	2197	8	4	1508	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8					2			
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	23.0	23.0		23.0	23.0		11.0	67.0	67.0	10.0	66.0	
Total Split (%)	23.0%	23.0%		23.0%	23.0%		11.0%	67.0%	67.0%	10.0%	66.0%	
Maximum Green (s)	18.5	18.5		18.5	18.5		6.5	62.5	62.5	5.5	61.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	Min	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)		7.9			7.9		7.1	74.4	74.4	6.2	80.8	
Actuated g/C Ratio		0.08			0.08		0.07	0.74	0.74	0.06	0.81	
v/c Ratio		0.53			0.13		0.21	0.62	0.01	0.07	0.42	
Control Delay		27.5			2.2		47.9	7.9	0.0	41.0	1.5	
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		27.5			2.2		47.9	7.9	0.0	41.0	1.5	
LOS		C			A		D	A	A	D	A	
Approach Delay		27.5			2.2			8.3			1.6	
Approach LOS		C			A			A			A	
90th %ile Green (s)	12.9	12.9		12.9	12.9		9.2	66.1	66.1	7.5	64.4	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
70th %ile Green (s)	9.2	9.2		9.2	9.2		7.8	70.8	70.8	6.5	69.5	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	6.6	6.6		6.6	6.6		0.0	74.0	74.0	5.9	84.4	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Coord	Coord	Gap	Coord	
30th %ile Green (s)	5.5	5.5		5.5	5.5		0.0	75.5	75.5	5.5	85.5	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Coord	Coord	Gap	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	85.5	85.5	5.5	95.5	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Coord	Coord	Gap	Coord	
Queue Length 50th (ft)		8			0		13	206	0	3	0	
Queue Length 95th (ft)		34			0		36	338	0	m3	0	
Internal Link Dist (ft)		640			367			1152			870	
Turn Bay Length (ft)							250		250	200		
Base Capacity (vph)		257			208		106	3572	662	55	3572	
Starvation Cap Reductn		0			0		0	0	0	0	0	
Spillback Cap Reductn		0			0		0	0	0	0	0	
Storage Cap Reductn		0			0		0	0	0	0	0	
Reduced v/c Ratio		0.30			0.08		0.20	0.62	0.01	0.07	0.42	

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 41 (41%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 160: Marvin Miller Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	30	0	0	250	219	64	1800	0	35	1108	0
Future Volume (vph)	30	30	0	0	250	219	64	1800	0	35	1108	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt					0.937							
Flt Protected		0.976					0.950			0.950		
Satd. Flow (prot)	0	1545	0	0	1484	0	1504	4322	0	1504	4322	1583
Flt Permitted		0.343					0.950			0.950		
Satd. Flow (perm)	0	543	0	0	1484	0	1504	4322	0	1504	4322	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					48							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.96	0.96	0.96	0.73	0.73	0.73
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Adj. Flow (vph)	44	44	0	0	322	282	77	2175	0	56	1761	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	88	0	0	604	0	77	2175	0	56	1761	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA			NA		Prot	NA		Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	39.0	39.0		39.0	39.0		10.7	51.5		9.5	50.3	50.3
Total Split (%)	39.0%	39.0%		39.0%	39.0%		10.7%	51.5%		9.5%	50.3%	50.3%
Maximum Green (s)	34.5	34.5		34.5	34.5		6.2	47.0		5.0	45.8	45.8
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		34.5			34.5		6.2	48.9		5.0	45.8	
Actuated g/C Ratio		0.34			0.34		0.06	0.49		0.05	0.46	
v/c Ratio		0.47			1.11		0.83	1.03		0.75	0.89	
Control Delay		35.7			103.4		97.8	48.3		103.2	31.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		35.7			103.4		97.8	48.3		103.2	31.2	
LOS		D			F		F	D		F	C	
Approach Delay		35.7			103.4			49.9			33.4	
Approach LOS		D			F			D			C	
90th %ile Green (s)	34.5	34.5		34.5	34.5		6.2	47.0		5.0	45.8	45.8
90th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
70th %ile Green (s)	34.5	34.5		34.5	34.5		6.2	47.0		5.0	45.8	45.8
70th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
50th %ile Green (s)	34.5	34.5		34.5	34.5		6.2	47.0		5.0	45.8	45.8
50th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
30th %ile Green (s)	34.5	34.5		34.5	34.5		6.2	47.0		5.0	45.8	45.8
30th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
10th %ile Green (s)	34.5	34.5		34.5	34.5		6.2	56.5		0.0	45.8	45.8
10th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Skip	Coord	Coord
Queue Length 50th (ft)		43			~423		53	~568		37	433	
Queue Length 95th (ft)		80			#638		m#111	#646		m#78	389	
Internal Link Dist (ft)		669			848			870			895	
Turn Bay Length (ft)							200			300		
Base Capacity (vph)		187			543		93	2113		75	1979	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.47			1.11		0.83	1.03		0.75	0.89	

Intersection Summary

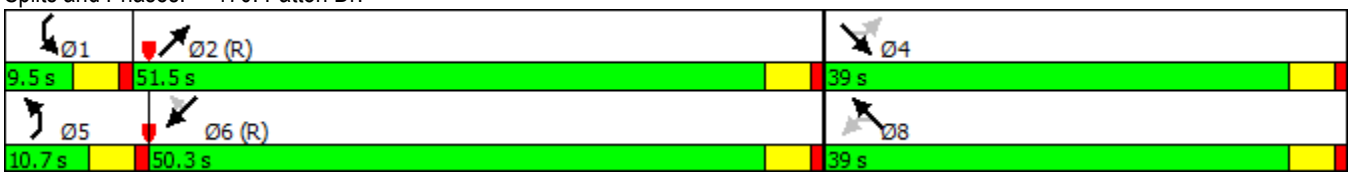
Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 40 (40%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 50.2	Intersection LOS: D
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 170: Patton Dr.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	27	2031	5	91	1120	14	76	4	20	15	5	82
Future Volume (vph)	27	2031	5	91	1120	14	76	4	20	15	5	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.973			0.892	
Flt Protected	0.950			0.950				0.963			0.993	
Satd. Flow (prot)	1805	4801	0	1770	5534	0	0	1724	0	0	1651	0
Flt Permitted	0.950			0.950				0.491			0.948	
Satd. Flow (perm)	1805	4801	0	1770	5534	0	0	879	0	0	1576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			4			11			117	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			245			480			470	
Travel Time (s)		17.3			5.6			10.9			10.7	
Peak Hour Factor	0.96	0.96	0.96	0.84	0.84	0.84	0.85	0.85	0.85	0.68	0.68	0.68
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	0%	8%	20%	2%	18%	7%	3%	0%	5%	13%	0%	0%
Adj. Flow (vph)	33	2454	6	126	1547	19	104	5	27	26	9	140
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	2460	0	126	1566	0	0	136	0	0	175	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4			8		
Detector Phase	5	2		1	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	10.6	60.6		15.6	65.6		23.8	23.8		23.8	23.8	
Total Split (%)	10.6%	60.6%		15.6%	65.6%		23.8%	23.8%		23.8%	23.8%	
Maximum Green (s)	6.1	56.1		11.1	61.1		19.3	19.3		19.3	19.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.0	59.4		10.4	67.9			16.7			16.7	
Actuated g/C Ratio	0.06	0.59		0.10	0.68			0.17			0.17	
v/c Ratio	0.31	0.86		0.69	0.42			0.87			0.49	
Control Delay	52.8	5.4		57.8	8.2			82.8			18.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	52.8	5.4		57.8	8.2			82.8			18.2	
LOS	D	A		E	A			F			B	
Approach Delay		6.0			11.9			82.8			18.2	
Approach LOS		A			B			F			B	
90th %ile Green (s)	6.1	56.1		11.1	61.1		19.3	19.3		19.3	19.3	
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Hold	Hold	
70th %ile Green (s)	6.1	56.1		11.1	61.1		19.3	19.3		19.3	19.3	
70th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Hold	Hold	
50th %ile Green (s)	6.1	56.1		11.1	61.1		19.3	19.3		19.3	19.3	
50th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Hold	Hold	
30th %ile Green (s)	0.0	60.2		10.7	75.4		15.6	15.6		15.6	15.6	
30th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	68.5		7.9	80.9		10.1	10.1		10.1	10.1	
10th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	22	78		86	106			76			31	
Queue Length 95th (ft)	m21	m75		#140	111			#160			50	
Internal Link Dist (ft)		680			165			400			390	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	111	2852		196	3759			178			398	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.30	0.86		0.64	0.42			0.76			0.44	

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 73 (73%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 11.0	Intersection LOS: B
Intersection Capacity Utilization 76.0%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 180: Commerce Cir.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2225	1185	65	0	40
Future Volume (vph)	0	2225	1185	65	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	0.86	0.86	1.00	1.00
Frt			0.987			0.865
Flt Protected						
Satd. Flow (prot)	0	6052	5564	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	6052	5564	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		245	541		662	
Travel Time (s)		5.6	12.3		15.0	
Peak Hour Factor	0.97	0.97	0.84	0.48	0.88	0.88
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	8%	8%	17%	5%	2%	2%
Adj. Flow (vph)	0	2661	1636	157	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2661	1793	0	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2223	14	73	1249	7	15	0	125	9	0	1
Future Volume (vph)	10	2223	14	73	1249	7	15	0	125	9	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.86	0.86	1.00	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.999			0.879			0.986	
Flt Protected	0.950			0.950				0.995			0.957	
Satd. Flow (prot)	1805	6044	0	1388	5633	0	0	1570	0	0	1629	0
Flt Permitted	0.950			0.950				0.962			0.399	
Satd. Flow (perm)	1805	6044	0	1388	5633	0	0	1518	0	0	679	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2			155			115	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		541			537			437			323	
Travel Time (s)		12.3			12.2			9.9			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.81	0.81	0.81	0.61	0.61	0.61
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	0%	8%	14%	30%	16%	0%	13%	0%	5%	11%	2%	2%
Adj. Flow (vph)	13	2803	18	100	1705	10	21	0	179	17	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	2821	0	100	1715	0	0	200	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.6	59.2		18.0	67.6		22.8	22.8		22.8	22.8	
Total Split (%)	9.6%	59.2%		18.0%	67.6%		22.8%	22.8%		22.8%	22.8%	
Maximum Green (s)	5.1	54.7		13.5	63.1		18.3	18.3		18.3	18.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	C-Max		Min	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	6.2	65.0		12.0	70.8			9.5			9.5	
Actuated g/C Ratio	0.06	0.65		0.12	0.71			0.10			0.10	
v/c Ratio	0.12	0.72		0.60	0.43			0.70			0.11	
Control Delay	51.2	3.4		69.3	1.6			25.4			1.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	51.2	3.4		69.3	1.6			25.4			1.3	
LOS	D	A		E	A			C			A	
Approach Delay		3.6			5.3			25.4			1.3	
Approach LOS		A			A			C			A	
90th %ile Green (s)	7.1	54.7		15.5	63.1		16.3	16.3		16.3	16.3	
90th %ile Term Code	Max	Coord		Max	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	6.7	60.1		14.6	68.0		11.8	11.8		11.8	11.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	6.1	65.5		12.4	71.8		8.6	8.6		8.6	8.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	5.6	70.7		10.3	75.4		5.5	5.5		5.5	5.5	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	5.5	73.9		7.1	75.5		5.5	5.5		5.5	5.5	
10th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	0	45		63	19			28			0	
Queue Length 95th (ft)	m12	79		m99	m40			71			0	
Internal Link Dist (ft)		461			457			357			243	
Turn Bay Length (ft)	300			150								
Base Capacity (vph)	112	3928		196	3986			404			218	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	68		0	0			1			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.12	0.73		0.51	0.43			0.50			0.09	

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 92 (92%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 5.1	Intersection LOS: A
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: Shirley Dr.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	251	0	174	0	0	0	0	1057	1178	409	1320	0
Future Volume (vph)	251	0	174	0	0	0	0	1057	1178	409	1320	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	225		0	0		0
Storage Lanes	2		1	0		0	0		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.88	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	3183	0	1346	0	0	0	0	6052	2608	1736	4510	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3183	0	1346	0	0	0	0	6052	2608	1736	4510	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65						732			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		758			734			537			524	
Travel Time (s)		17.2			16.7			12.2			11.9	
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	0.91	0.91	0.91
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	10%	0%	20%	2%	2%	2%	0%	8%	9%	4%	15%	0%
Adj. Flow (vph)	347	0	240	0	0	0	0	1460	1627	521	1683	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	0	240	0	0	0	0	1460	1627	521	1683	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1		1					2	1	1	2	
Detector Template	Left		Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20		20					100	20	20	100	
Trailing Detector (ft)	0		0					0	0	0	0	
Detector 1 Position(ft)	0		0					0	0	0	0	
Detector 1 Size(ft)	20		20					6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot		Perm					NA	Perm	Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7							2		1	6	
Permitted Phases			7						2			
Detector Phase	7		7					2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5		9.5					22.5	22.5	9.5	22.5	
Total Split (s)	18.0		18.0					48.8	48.8	33.2	82.0	
Total Split (%)	18.0%		18.0%					48.8%	48.8%	33.2%	82.0%	
Maximum Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
Yellow Time (s)	3.5		3.5					3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5					4.5	4.5	4.5	4.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Recall Mode	None		None					C-Min	C-Min	None	C-Min	
Walk Time (s)								7.0	7.0		7.0	
Flash Dont Walk (s)								11.0	11.0		11.0	
Pedestrian Calls (#/hr)								0	0		0	
Act Effct Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
Actuated g/C Ratio	0.14		0.14					0.44	0.44	0.29	0.78	
v/c Ratio	0.81		1.01					0.54	1.04	1.05	0.48	
Control Delay	57.8		94.9					10.9	40.5	69.6	3.4	
Queue Delay	0.0		0.0					0.0	24.0	0.0	0.5	
Total Delay	57.8		94.9					10.9	64.5	69.6	3.9	
LOS	E		F					B	E	E	A	
Approach Delay		73.0						39.2			19.4	
Approach LOS		E						D			B	
90th %ile Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
90th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
70th %ile Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
70th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
50th %ile Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
50th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
30th %ile Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
30th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
10th %ile Green (s)	13.5		13.5					44.3	44.3	28.7	77.5	
10th %ile Term Code	Max		Max					Coord	Coord	Max	Coord	
Queue Length 50th (ft)	112		~118					82	~117	~357	101	
Queue Length 95th (ft)	#158		#245					69	#145	m#416	m110	
Internal Link Dist (ft)		678			654			457			444	
Turn Bay Length (ft)												
Base Capacity (vph)	429		237					2681	1563	498	3495	
Starvation Cap Reductn	0		0					0	168	0	1182	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.81		1.01					0.54	1.17	1.05	0.73	

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 4 (4%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 35.1	Intersection LOS: D
Intersection Capacity Utilization 93.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 210: I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	520	0	265	305	978	0	0	1189	873
Future Volume (vph)	0	0	0	520	0	265	305	978	0	0	1189	873
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		400	0		0	0		0
Storage Lanes	0		0	3		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.91	1.00	1.00	0.86	0.86
Frt						0.850					0.936	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	4545	0	1524	1517	4715	0	0	5801	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	4545	0	1524	1517	4715	0	0	5801	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						117					231	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			795			524			744	
Travel Time (s)		11.1			18.1			11.9			16.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	12%	2%	6%	19%	10%	2%	16%	8%	2%
Adj. Flow (vph)	0	0	0	656	0	334	385	1233	0	0	1499	1101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	656	0	334	385	1233	0	0	2600	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1		1	1	2			2	
Detector Template				Left		Right	Left	Thru			Thru	
Leading Detector (ft)				20		20	20	100			100	
Trailing Detector (ft)				0		0	0	0			0	
Detector 1 Position(ft)				0		0	0	0			0	
Detector 1 Size(ft)				20		20	20	6			6	
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0		0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0		0.0	0.0	0.0			0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type				Prot		Perm	Prot	NA			NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases				3			5	2			6	
Permitted Phases						8						
Detector Phase				3		8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0		5.0	5.0	5.0			5.0	
Minimum Split (s)				9.5		22.5	9.5	22.5			22.5	
Total Split (s)				22.6		22.6	30.3	77.4			47.1	
Total Split (%)				22.6%		22.6%	30.3%	77.4%			47.1%	
Maximum Green (s)				18.1		18.1	25.8	72.9			42.6	
Yellow Time (s)				3.5		3.5	3.5	3.5			3.5	
All-Red Time (s)				1.0		1.0	1.0	1.0			1.0	
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	
Total Lost Time (s)				4.5		4.5	4.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	
Recall Mode				None		None	None	C-Min			C-Min	
Walk Time (s)						7.0		7.0			7.0	
Flash Dont Walk (s)						11.0		11.0			11.0	
Pedestrian Calls (#/hr)						0		0			0	
Act Effct Green (s)				17.6		17.6	26.3	73.4			42.6	
Actuated g/C Ratio				0.18		0.18	0.26	0.73			0.43	
v/c Ratio				0.82		0.92	0.96	0.36			1.35dr	
Control Delay				49.2		57.8	65.3	0.3			33.7	
Queue Delay				0.0		0.0	0.0	0.0			0.0	
Total Delay				49.2		57.8	65.3	0.3			33.7	
LOS				D		E	E	A			C	
Approach Delay					52.1			15.8			33.7	
Approach LOS					D			B			C	
90th %ile Green (s)				18.1		18.1	25.8	72.9			42.6	
90th %ile Term Code				Max		Max	Max	Coord			Coord	
70th %ile Green (s)				18.1		18.1	25.8	72.9			42.6	
70th %ile Term Code				Max		Max	Max	Coord			Coord	
50th %ile Green (s)				18.1		18.1	25.8	72.9			42.6	
50th %ile Term Code				Max		Max	Max	Coord			Coord	
30th %ile Green (s)				18.1		18.1	25.8	72.9			42.6	
30th %ile Term Code				Hold		Max	Max	Coord			Coord	
10th %ile Green (s)				15.5		15.5	28.4	75.5			42.6	
10th %ile Term Code				Gap		Hold	Max	Coord			Coord	
Queue Length 50th (ft)				143		140	232	0			427	
Queue Length 95th (ft)				186		#306	m#421	0			m#541	
Internal Link Dist (ft)		407			715			444			664	
Turn Bay Length (ft)						400						
Base Capacity (vph)				822		371	399	3461			2603	
Starvation Cap Reductn				0		0	0	0			0	
Spillback Cap Reductn				0		0	0	0			0	
Storage Cap Reductn				0		0	0	0			0	
Reduced v/c Ratio				0.80		0.90	0.96	0.36			1.00	

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 47 (47%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 31.7		Intersection LOS: C	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 220: I-20 WB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	39	1182	131	30	1598	5	48	13	50	121	16	35
Future Volume (vph)	39	1182	131	30	1598	5	48	13	50	121	16	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.999			0.946			0.976	
Flt Protected	0.950			0.950				0.975			0.967	
Satd. Flow (prot)	1399	4771	0	1805	4756	0	0	1672	0	0	1725	0
Flt Permitted	0.079			0.109				0.767			0.653	
Satd. Flow (perm)	116	4771	0	207	4756	0	0	1316	0	0	1165	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			1			24			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		744			1498			395			449	
Travel Time (s)		16.9			34.0			9.0			10.2	
Peak Hour Factor	0.58	0.92	0.76	0.78	0.97	0.69	0.56	0.80	0.73	0.78	0.50	0.88
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	29%	7%	5%	0%	9%	0%	0%	8%	10%	5%	0%	3%
Adj. Flow (vph)	78	1490	200	45	1911	8	99	19	79	180	37	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	1690	0	45	1919	0	0	197	0	0	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	72.8	72.8		72.8	72.8		27.2	27.2		27.2	27.2	
Total Split (%)	72.8%	72.8%		72.8%	72.8%		27.2%	27.2%		27.2%	27.2%	
Maximum Green (s)	68.3	68.3		68.3	68.3		22.7	22.7		22.7	22.7	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	68.3	68.3		68.3	68.3			22.7			22.7	
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.23			0.23	
v/c Ratio	0.99	0.52		0.32	0.59			0.62			0.97	
Control Delay	115.2	2.9		3.3	2.8			40.1			85.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	115.2	2.9		3.3	2.8			40.1			85.5	
LOS	F	A		A	A			D			F	
Approach Delay		7.9			2.8			40.1			85.5	
Approach LOS		A			A			D			F	
90th %ile Green (s)	68.3	68.3		68.3	68.3		22.7	22.7		22.7	22.7	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	68.3	68.3		68.3	68.3		22.7	22.7		22.7	22.7	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	68.3	68.3		68.3	68.3		22.7	22.7		22.7	22.7	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	68.3	68.3		68.3	68.3		22.7	22.7		22.7	22.7	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	68.3	68.3		68.3	68.3		22.7	22.7		22.7	22.7	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Queue Length 50th (ft)	45	71		2	32			100			161	
Queue Length 95th (ft)	m#73	m79		m2	m27			151			122	
Internal Link Dist (ft)		664			1418			315			369	
Turn Bay Length (ft)	150			200								
Base Capacity (vph)	79	3275		141	3248			317			272	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.99	0.52		0.32	0.59			0.62			0.97	

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 27 (27%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 63.0%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 230: Wendell Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	130	479	490	251	612	55	513	514	161	80	1058	229
Future Volume (vph)	130	479	490	251	612	55	513	514	161	80	1058	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3242	3505	1553	3335	3539	1429	3303	3223	1509	3400	3312	1482
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3242	3505	1553	3335	3539	1429	3303	3223	1509	3400	3312	1482
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214			164			199			181
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	0.94	0.94	0.94	0.88	0.88	0.88
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	8%	3%	4%	5%	2%	13%	6%	12%	7%	3%	9%	9%
Adj. Flow (vph)	171	631	646	339	825	74	633	634	199	105	1395	302
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	631	646	339	825	74	633	634	199	105	1395	302
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.8	28.0	28.0	13.0	30.2	30.2	19.0	47.5	47.5	11.5	40.0	40.0
Total Split (%)	10.8%	28.0%	28.0%	13.0%	30.2%	30.2%	19.0%	47.5%	47.5%	11.5%	40.0%	40.0%
Maximum Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	43.0	43.0	7.0	35.5	35.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	45.3	45.3	6.8	35.5	35.5
Actuated g/C Ratio	0.06	0.24	0.24	0.08	0.26	0.26	0.14	0.45	0.45	0.07	0.36	0.36
v/c Ratio	0.84	0.77	1.22	1.20	0.91	0.15	1.32	0.43	0.25	0.45	1.19	0.47
Control Delay	79.4	42.8	141.1	158.7	51.1	0.7	188.0	15.3	4.6	65.6	114.3	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	42.8	141.1	158.7	51.1	0.7	188.0	15.3	4.6	65.6	114.3	5.3
LOS	E	D	F	F	D	A	F	B	A	E	F	A
Approach Delay		91.0			77.6			88.4			93.2	
Approach LOS		F			E			F			F	
90th %ile Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	43.0	43.0	7.0	35.5	35.5
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	43.0	43.0	7.0	35.5	35.5
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	43.0	43.0	7.0	35.5	35.5
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	43.0	43.0	7.0	35.5	35.5
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	6.3	23.5	23.5	8.5	25.7	25.7	14.5	54.5	54.5	0.0	35.5	35.5
10th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
Queue Length 50th (ft)	56	198	~399	~135	268	0	~265	168	39	34	~572	44
Queue Length 95th (ft)	#111	255	#593	#210	#350	0	m#381	m202	m64	m48	#676	m32
Internal Link Dist (ft)		1021			1100			1418			1649	
Turn Bay Length (ft)				250		400	350			300		
Base Capacity (vph)	204	823	528	283	909	489	478	1459	792	238	1175	642
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.77	1.22	1.20	0.91	0.15	1.32	0.43	0.25	0.44	1.19	0.47

Intersection Summary

Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 90 (90%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.32	
Intersection Signal Delay: 88.2	Intersection LOS: F
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 240: MLK Jr. Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	10	4	47	50	40	38	691	20	30	1089	20
Future Volume (vph)	4	10	4	47	50	40	38	691	20	30	1089	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	150		250
Storage Lanes	0		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.933				0.850			0.850
Flt Protected		0.986		0.950			0.950			0.950		
Satd. Flow (prot)	0	1837	1583	1770	1738	0	1612	3223	1442	1656	3312	1482
Flt Permitted		0.935		0.615			0.087			0.258		
Satd. Flow (perm)	0	1742	1583	1146	1738	0	148	3223	1442	450	3312	1482
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115		40				115			115
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		617			886			1729			1350	
Travel Time (s)		14.0			20.1			39.3			30.7	
Peak Hour Factor	0.63	0.63	0.63	0.78	0.83	0.83	0.79	0.91	0.92	0.75	0.94	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	12%	12%	12%	9%	9%	9%
Adj. Flow (vph)	7	18	7	70	70	56	56	881	25	46	1344	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	7	70	126	0	56	881	25	46	1344	25
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

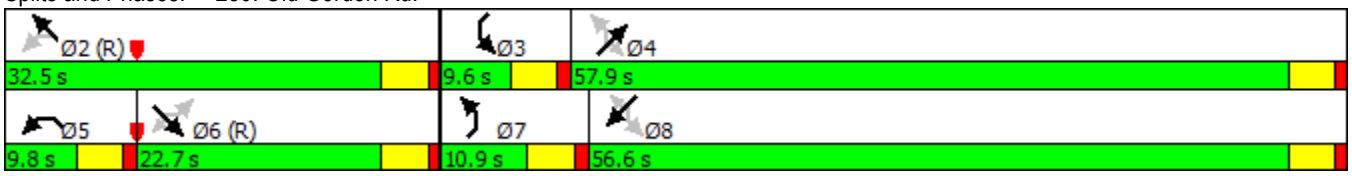
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8
Detector Phase	6	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.7	22.7	22.7	9.8	32.5		10.9	57.9	57.9	9.6	56.6	56.6
Total Split (%)	22.7%	22.7%	22.7%	9.8%	32.5%		10.9%	57.9%	57.9%	9.6%	56.6%	56.6%
Maximum Green (s)	18.2	18.2	18.2	5.3	28.0		6.4	53.4	53.4	5.1	52.1	52.1
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0			0	0		0	0
Act Effct Green (s)		24.7	24.7	33.0	33.0		56.1	52.2	52.2	53.3	49.3	49.3
Actuated g/C Ratio		0.25	0.25	0.33	0.33		0.56	0.52	0.52	0.53	0.49	0.49
v/c Ratio		0.06	0.01	0.17	0.21		0.32	0.52	0.03	0.15	0.82	0.03
Control Delay		34.5	0.0	27.6	19.6		10.0	11.3	0.4	6.6	16.6	0.1
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		34.5	0.0	27.6	19.6		10.0	11.3	0.4	6.6	16.6	0.1
LOS		C	A	C	B		A	B	A	A	B	A
Approach Delay		27.0			22.5			10.9			16.0	
Approach LOS		C			C			B			B	
90th %ile Green (s)	18.2	18.2	18.2	5.3	28.0		6.4	53.4	53.4	5.1	52.1	52.1
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	18.2	18.2	18.2	5.3	28.0		6.4	53.4	53.4	5.1	52.1	52.1
70th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	18.2	18.2	18.2	6.0	28.7		6.4	52.7	52.7	5.1	51.4	51.4
50th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold	Hold	Max	Gap	Gap
30th %ile Green (s)	20.4	20.4	20.4	7.2	32.1		6.4	58.9	58.9	0.0	48.0	48.0
30th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Max	Hold	Hold	Skip	Gap	Gap
10th %ile Green (s)	48.3	48.3	48.3	0.0	48.3		0.0	42.7	42.7	0.0	42.7	42.7
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Skip	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)		13	0	33	41		2	205	0	6	108	0
Queue Length 95th (ft)		25	0	58	79		m10	m263	m1	13	134	m0
Internal Link Dist (ft)		537			806			1649			1270	
Turn Bay Length (ft)							150			150		250
Base Capacity (vph)		429	477	414	600		176	1756	838	301	1725	827
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.06	0.01	0.17	0.21		0.32	0.50	0.03	0.15	0.78	0.03

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 1 (1%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 14.7	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 250: Old Gordon Rd.



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	149	149	100	635	990	0
Future Volume (vph)	149	149	100	635	990	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1863
Flt Permitted	0.950		0.154			
Satd. Flow (perm)	1770	1583	287	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		188				
Link Speed (mph)	30			30	30	
Link Distance (ft)	912			1889	1254	
Travel Time (s)	20.7			42.9	28.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	188	188	126	801	1248	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	188	188	126	801	1248	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	26.0	26.0	15.0	74.0	59.0	59.0
Total Split (%)	26.0%	26.0%	15.0%	74.0%	59.0%	59.0%
Maximum Green (s)	21.5	21.5	10.5	69.5	54.5	54.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	15.8	15.8	75.2	75.2	63.1	
Actuated g/C Ratio	0.16	0.16	0.75	0.75	0.63	
v/c Ratio	0.67	0.46	0.39	0.30	0.56	
Control Delay	51.2	9.0	7.5	0.6	12.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	51.2	9.0	7.5	0.6	12.6	
LOS	D	A	A	A	B	
Approach Delay	30.1			1.5	12.6	
Approach LOS	C			A	B	
90th %ile Green (s)	21.5	21.5	9.6	69.5	55.4	55.4
90th %ile Term Code	Max	Max	Gap	Coord	Coord	Coord
70th %ile Green (s)	18.2	18.2	8.2	72.8	60.1	60.1
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	15.8	15.8	7.4	75.2	63.3	63.3
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	13.5	13.5	6.7	77.5	66.3	66.3
30th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
10th %ile Green (s)	10.0	10.0	5.9	81.0	70.6	70.6
10th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
Queue Length 50th (ft)	114	0	12	3	216	
Queue Length 95th (ft)	175	55	23	4	341	
Internal Link Dist (ft)	832			1809	1174	
Turn Bay Length (ft)						
Base Capacity (vph)	380	487	371	2661	2234	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.49	0.39	0.34	0.30	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100

Offset: 99 (99%), Referenced to phase 2:NETL and 6:SWT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 270: Fulton Ind. Blvd & UPS Drive

Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	85	0	28	651	1417	0
Future Volume (vph)	85	0	28	651	1417	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300			0
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1570	1652	1570	3139	3139	1652
Flt Permitted	0.950		0.071			
Satd. Flow (perm)	1570	1652	117	3139	3139	1652
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1300			1130	416	
Travel Time (s)	29.5			25.7	9.5	
Peak Hour Factor	0.82	0.92	0.64	0.91	0.94	0.92
Growth Factor	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%
Adj. Flow (vph)	120	0	51	830	1749	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	0	51	830	1749	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm

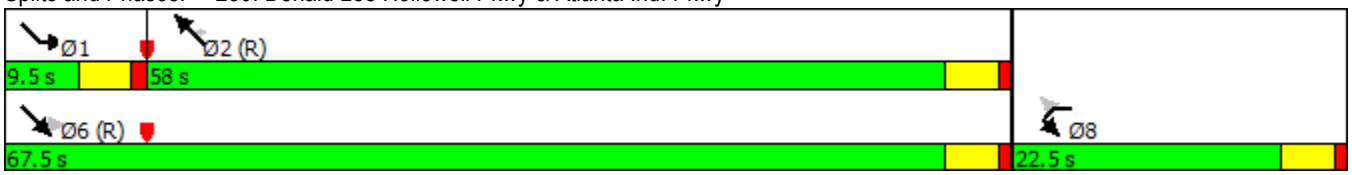
Lane Group	WBL	WBR	SEL	SET	NWT	NWR
Protected Phases	8		1	6	2	
Permitted Phases		8	6			2
Detector Phase	8	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	9.5	67.5	58.0	58.0
Total Split (%)	25.0%	25.0%	10.6%	75.0%	64.4%	64.4%
Maximum Green (s)	18.0	18.0	5.0	63.0	53.5	53.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	12.1		68.9	68.9	62.4	
Actuated g/C Ratio	0.13		0.77	0.77	0.69	
v/c Ratio	0.57		0.27	0.35	0.80	
Control Delay	46.3		6.9	4.2	7.2	
Queue Delay	0.0		0.0	0.0	0.1	
Total Delay	46.3		6.9	4.2	7.3	
LOS	D		A	A	A	
Approach Delay	46.3			4.4	7.3	
Approach LOS	D			A	A	
90th %ile Green (s)	17.1	17.1	5.9	63.9	53.5	53.5
90th %ile Term Code	Gap	Gap	Max	Coord	Coord	Coord
70th %ile Green (s)	14.1	14.1	6.6	66.9	55.8	55.8
70th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
50th %ile Green (s)	12.1	12.1	6.2	68.9	58.2	58.2
50th %ile Term Code	Gap	Gap	Gap	Coord	Coord	Coord
30th %ile Green (s)	10.1	10.1	0.0	70.9	70.9	70.9
30th %ile Term Code	Gap	Gap	Skip	Coord	Coord	Coord
10th %ile Green (s)	7.2	7.2	0.0	73.8	73.8	73.8
10th %ile Term Code	Gap	Gap	Skip	Coord	Coord	Coord
Queue Length 50th (ft)	65		6	62	66	
Queue Length 95th (ft)	102		12	110	m#143	
Internal Link Dist (ft)	1220			1050	336	
Turn Bay Length (ft)			300			
Base Capacity (vph)	314		186	2402	2177	
Starvation Cap Reductn	0		0	0	43	
Spillback Cap Reductn	0		0	102	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.38		0.27	0.36	0.82	

Intersection Summary

Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 66 (73%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 58.4%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 280: Donald Lee Hollowell Pkwy & Atlanta Ind. Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	55	807	100	230	1328	0	55	148	0	16	203	127
Future Volume (vph)	55	807	100	230	1328	0	55	148	0	16	203	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		200	300		0	300		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850								0.942	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1570	3139	1404	1570	3139	0	1570	3139	0	1570	2957	0
Flt Permitted	0.113			0.121			0.270			0.611		
Satd. Flow (perm)	187	3139	1404	200	3139	0	446	3139	0	1009	2957	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182								142	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			899			1051			1138	
Travel Time (s)		9.5			20.4			23.9			25.9	
Peak Hour Factor	0.98	0.93	0.92	0.82	0.95	0.92	0.92	0.76	0.92	0.67	0.88	0.86
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Adj. Flow (vph)	65	1007	126	325	1622	0	69	226	0	28	268	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	1007	126	325	1622	0	69	226	0	28	439	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	38.8	38.8	19.2	48.5		9.5	22.5		9.5	22.5	
Total Split (%)	10.6%	43.1%	43.1%	21.3%	53.9%		10.6%	25.0%		10.6%	25.0%	
Maximum Green (s)	5.0	34.3	34.3	14.7	44.0		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	43.8	38.1	38.1	58.9	50.7		20.3	18.3		18.5	14.5	
Actuated g/C Ratio	0.49	0.42	0.42	0.65	0.56		0.23	0.20		0.21	0.16	
v/c Ratio	0.36	0.76	0.18	0.86	0.92		0.43	0.36		0.12	0.74	
Control Delay	20.2	27.5	1.8	32.9	31.1		32.7	32.1		24.3	31.7	
Queue Delay	0.0	0.3	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.2	27.8	1.8	32.9	31.1		32.7	32.1		24.3	31.7	
LOS	C	C	A	C	C		C	C		C	C	
Approach Delay		24.7			31.4			32.3			31.2	
Approach LOS		C			C			C			C	
90th %ile Green (s)	5.0	34.3	34.3	14.7	44.0		5.0	18.0		5.0	18.0	
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	5.3	34.3	34.3	15.0	44.0		5.0	17.7		5.0	17.7	
70th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	6.9	34.3	34.3	18.0	45.4		5.0	24.2		0.0	14.7	
50th %ile Term Code	Gap	Coord	Coord	Max	Coord		Max	Hold		Skip	Gap	
30th %ile Green (s)	6.2	34.5	34.5	20.0	48.3		5.0	22.0		0.0	12.5	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Max	Hold		Skip	Gap	
10th %ile Green (s)	0.0	52.9	52.9	14.2	71.6		0.0	9.4		0.0	9.4	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord		Skip	Hold		Skip	Gap	
Queue Length 50th (ft)	11	277	2	164	~426		30	53		12	84	
Queue Length 95th (ft)	37	#364	14	m#195	m#577		60	77		23	126	
Internal Link Dist (ft)		336			819			971			1058	
Turn Bay Length (ft)	200		200	300			300			200		
Base Capacity (vph)	179	1327	698	381	1766		162	698		238	705	
Starvation Cap Reductn	0	52	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.79	0.18	0.85	0.92		0.43	0.32		0.12	0.62	

Intersection Summary

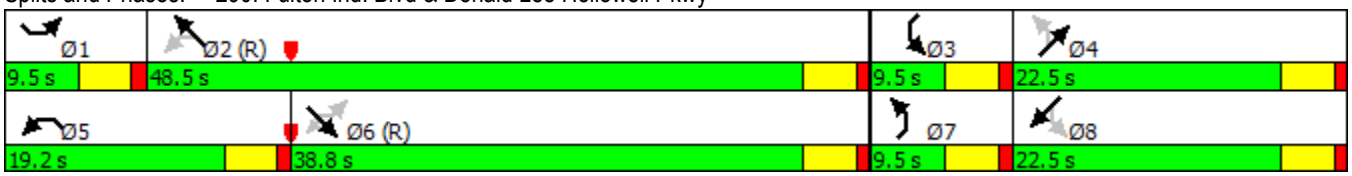
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 90		
Offset: 76 (84%), Referenced to phase 2:NWTL and 6:SETL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay: 29.4		Intersection LOS: C
Intersection Capacity Utilization 77.1%		ICU Level of Service D
Analysis Period (min) 15		

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 290: Fulton Ind. Blvd & Donald Lee Hollowell Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	931	45	118	1395	42	32	49	63	46	73	49
Future Volume (vph)	6	931	45	118	1395	42	32	49	63	46	73	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.996			0.941			0.960	
Flt Protected	0.950			0.950				0.989			0.986	
Satd. Flow (prot)	1805	3301	0	1787	3188	0	0	1734	0	0	1758	0
Flt Permitted	0.077			0.135				0.818			0.780	
Satd. Flow (perm)	146	3301	0	254	3188	0	0	1434	0	0	1391	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			6			39			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		899			304			783			722	
Travel Time (s)		20.4			6.9			17.8			16.4	
Peak Hour Factor	0.90	0.90	0.90	0.78	0.78	0.78	0.95	0.95	0.95	0.88	0.88	0.88
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	0%	9%	0%	1%	13%	5%	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	8	1200	58	175	2075	62	39	60	77	61	96	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	1258	0	175	2137	0	0	176	0	0	222	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	9.5	51.7		15.8	58.0		22.5	22.5		22.5	22.5	
Total Split (%)	10.6%	57.4%		17.6%	64.4%		25.0%	25.0%		25.0%	25.0%	
Maximum Green (s)	5.0	47.2		11.3	53.5		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	57.1	51.9		65.0	63.1			16.0			16.0	
Actuated g/C Ratio	0.63	0.58		0.72	0.70			0.18			0.18	
v/c Ratio	0.04	0.66		0.53	0.96			0.61			0.84	
Control Delay	1.7	4.1		12.5	18.3			35.6			58.9	
Queue Delay	0.0	0.1		0.0	0.0			0.0			0.0	
Total Delay	1.7	4.3		12.6	18.3			35.6			58.9	
LOS	A	A		B	B			D			E	
Approach Delay		4.3			17.9			35.6			58.9	
Approach LOS		A			B			D			E	
90th %ile Green (s)	5.0	47.2		11.3	53.5		18.0	18.0		18.0	18.0	
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Max	Max	
70th %ile Green (s)	0.0	49.2		9.3	63.0		18.0	18.0		18.0	18.0	
70th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	0.0	50.1		8.4	63.0		18.0	18.0		18.0	18.0	
50th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	0.0	53.8		7.4	65.7		15.3	15.3		15.3	15.3	
30th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	59.4		6.2	70.1		10.9	10.9		10.9	10.9	
10th %ile Term Code	Skip	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	0	39		16	197			70			109	
Queue Length 95th (ft)	m1	49		m38	#684			137			#211	
Internal Link Dist (ft)		819			224			703			642	
Turn Bay Length (ft)	400			150								
Base Capacity (vph)	188	1908		375	2235			318			295	
Starvation Cap Reductn	0	0		4	0			0			0	
Spillback Cap Reductn	0	94		0	0			1			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.04	0.69		0.47	0.96			0.56			0.75	

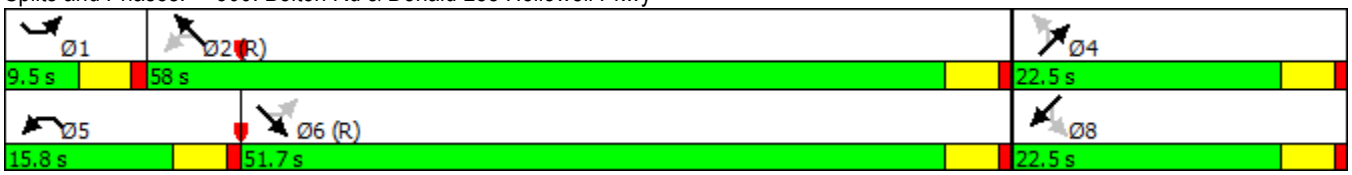
Intersection Summary

Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 87 (97%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 16.6		Intersection LOS: B	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 300: Bolton Rd & Donald Lee Hollowell Pkwy



Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	0	0	0	643	389	160	1141	0	128	0	429
Future Volume (vph)	0	0	0	643	389	160	1141	0	128	0	429
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00
Frt				0.943							0.850
Flt Protected						0.950			0.950		
Satd. Flow (prot)	0	0	0	3149	0	1467	3343	0	2694	0	1335
Flt Permitted						0.102			0.950		
Satd. Flow (perm)	0	0	0	3149	0	158	3343	0	2694	0	1335
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				165							73
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	922			304			568			593	
Travel Time (s)	21.0			6.9			12.9			13.5	
Peak Hour Factor	0.92	0.92	0.95	0.95	0.95	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	10%	5%	23%	8%	2%	30%	2%	21%
Adj. Flow (vph)	0	0	0	785	475	193	1379	0	156	0	524
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	0	1260	0	193	1379	0	156	0	524
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			24			24			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors				2		1	2		1		1
Detector Template				Thru		Left	Thru		Left		Right
Leading Detector (ft)				100		20	100		20		20
Trailing Detector (ft)				0		0	0		0		0
Detector 1 Position(ft)				0		0	0		0		0
Detector 1 Size(ft)				6		20	6		20		20
Detector 1 Type				Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type				NA		pm+pt	NA		Prot		Perm
Protected Phases				6		5	2		3		
Permitted Phases						2					8
Detector Phase				6		5	2		3		8

Lane Group	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Switch Phase											
Minimum Initial (s)				5.0		5.0	5.0		5.0		5.0
Minimum Split (s)				22.5		9.5	22.5		9.5		22.5
Total Split (s)				39.4		13.8	53.2		36.8		36.8
Total Split (%)				43.8%		15.3%	59.1%		40.9%		40.9%
Maximum Green (s)				34.9		9.3	48.7		32.3		32.3
Yellow Time (s)				3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)				0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)				4.5		4.5	4.5		4.5		4.5
Lead/Lag				Lag		Lead					
Lead-Lag Optimize?				Yes		Yes					
Vehicle Extension (s)				3.0		3.0	3.0		3.0		3.0
Recall Mode				C-Min		None	C-Min		None		None
Walk Time (s)				7.0			7.0				7.0
Flash Dont Walk (s)				11.0			11.0				11.0
Pedestrian Calls (#/hr)				0			0				0
Act Effct Green (s)				34.9		48.7	48.7		32.3		32.3
Actuated g/C Ratio				0.39		0.54	0.54		0.36		0.36
v/c Ratio				0.95		0.88	0.76		0.16		1.00
Control Delay				25.0		49.1	6.8		20.2		65.8
Queue Delay				8.1		0.0	0.5		0.0		33.5
Total Delay				33.1		49.1	7.2		20.2		99.3
LOS				C		D	A		C		F
Approach Delay				33.1			12.4			81.2	
Approach LOS				C			B			F	
90th %ile Green (s)				34.9		9.3	48.7		32.3		32.3
90th %ile Term Code				Coord		Max	Coord		Hold		Max
70th %ile Green (s)				34.9		9.3	48.7		32.3		32.3
70th %ile Term Code				Coord		Max	Coord		Hold		Max
50th %ile Green (s)				34.9		9.3	48.7		32.3		32.3
50th %ile Term Code				Coord		Max	Coord		Hold		Max
30th %ile Green (s)				34.9		9.3	48.7		32.3		32.3
30th %ile Term Code				Coord		Max	Coord		Hold		Max
10th %ile Green (s)				34.9		9.3	48.7		32.3		32.3
10th %ile Term Code				Coord		Max	Coord		Hold		Max
Queue Length 50th (ft)				77		44	7		30		261
Queue Length 95th (ft)				#456		m#118	16		52		#481
Internal Link Dist (ft)	842			224			488			513	
Turn Bay Length (ft)											
Base Capacity (vph)				1322		220	1808		966		525
Starvation Cap Reductn				65		0	60		0		0
Spillback Cap Reductn				0		0	124		0		48
Storage Cap Reductn				0		0	0		0		0
Reduced v/c Ratio				1.00		0.88	0.82		0.16		1.10

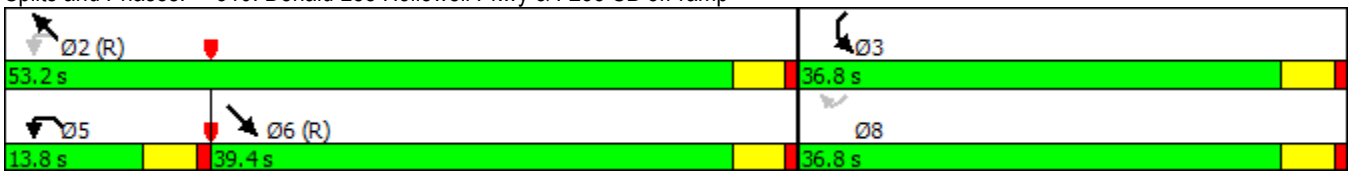
Intersection Summary	
Area Type:	Other
Cycle Length: 90	

Actuated Cycle Length: 90	
Offset: 6 (7%), Referenced to phase 2:NWTL and 6:SET, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 310: Donald Lee Hollowell Pkwy & I-285 SB off-ramp



Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (vph)	0	0	332	427	0	0	702	142	576	0	246
Future Volume (vph)	0	0	332	427	0	0	702	142	576	0	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	300		0	0		0		0	0
Storage Lanes	0	0	1		0	0		0		2	1
Taper Length (ft)	25		25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91	0.97	1.00	1.00
Frt							0.975				0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1504	3167	0	0	4542	0	3213	0	1262
Flt Permitted			0.124						0.950		
Satd. Flow (perm)	0	0	196	3167	0	0	4542	0	3213	0	1262
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)							46				348
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	782			568			1114			887	
Travel Time (s)	17.8			12.9			25.3			20.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.86	0.86
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	20%	14%	2%	2%	10%	18%	9%	2%	28%
Adj. Flow (vph)	0	0	419	538	0	0	885	179	777	0	332
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	419	538	0	0	1064	0	777	0	332
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			24	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			pm+pt	NA			NA		Prot		Perm

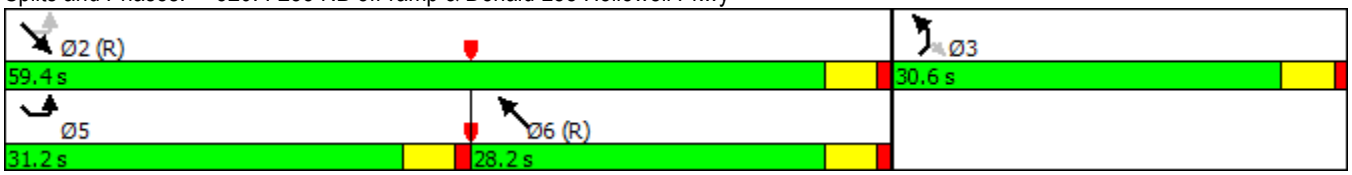
Lane Group	SBL	SBR	SEL	SET	SER	NWL	NWT	NWR	NEL2	NEL	NER
Protected Phases			5	2			6		3		
Permitted Phases			2								3
Detector Phase			5	2			6		3		3
Switch Phase											
Minimum Initial (s)			5.0	5.0			5.0		5.0		5.0
Minimum Split (s)			9.5	22.5			22.5		9.5		9.5
Total Split (s)			31.2	59.4			28.2		30.6		30.6
Total Split (%)			34.7%	66.0%			31.3%		34.0%		34.0%
Maximum Green (s)			26.7	54.9			23.7		26.1		26.1
Yellow Time (s)			3.5	3.5			3.5		3.5		3.5
All-Red Time (s)			1.0	1.0			1.0		1.0		1.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			4.5	4.5			4.5		4.5		4.5
Lead/Lag			Lead				Lag				
Lead-Lag Optimize?			Yes				Yes				
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			Min	C-Min			C-Min		None		None
Walk Time (s)				7.0			7.0				
Flash Dont Walk (s)				11.0			11.0				
Pedestrian Calls (#/hr)				0			0				
Act Effct Green (s)			55.9	55.9			28.4		25.1		25.1
Actuated g/C Ratio			0.62	0.62			0.32		0.28		0.28
v/c Ratio			0.92	0.27			0.73		0.87		0.55
Control Delay			28.2	4.8			31.1		42.4		6.4
Queue Delay			0.0	0.0			0.0		0.0		0.0
Total Delay			28.2	4.8			31.1		42.4		6.4
LOS			C	A			C		D		A
Approach Delay				15.1			31.1			31.6	
Approach LOS				B			C			C	
90th %ile Green (s)			26.7	54.9			23.7		26.1		26.1
90th %ile Term Code			Max	Coord			Coord		Max		Max
70th %ile Green (s)			26.7	54.9			23.7		26.1		26.1
70th %ile Term Code			Max	Coord			Coord		Max		Max
50th %ile Green (s)			26.1	54.9			24.3		26.1		26.1
50th %ile Term Code			Gap	Coord			Coord		Max		Max
30th %ile Green (s)			21.3	55.7			29.9		25.3		25.3
30th %ile Term Code			Gap	Coord			Coord		Gap		Gap
10th %ile Green (s)			14.0	59.1			40.6		21.9		21.9
10th %ile Term Code			Gap	Coord			Coord		Gap		Gap
Queue Length 50th (ft)			134	61			201		212		0
Queue Length 95th (ft)			m186	m69			#276		266		44
Internal Link Dist (ft)	702			488			1034			807	
Turn Bay Length (ft)			300								
Base Capacity (vph)			509	1966			1466		931		613
Starvation Cap Reductn			0	0			0		0		0
Spillback Cap Reductn			0	0			0		0		0
Storage Cap Reductn			0	0			0		0		0
Reduced v/c Ratio			0.82	0.27			0.73		0.83		0.54

Intersection Summary

Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 65 (72%), Referenced to phase 2:SETL and 6:NWT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 26.4	Intersection LOS: C
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 320: I-285 NB off-ramp & Donald Lee Hollowell Pkwy



Synchro Report - Signal Improvements 2031 AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Future Volume (vph)	0	51	0	0	527	0	175	2432	0	17	1647	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.97	0.91	1.00	1.00	0.91	1.00
Frt												
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	3539	0	3433	5085	0	1770	5085	1863
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	1863	0	0	3539	0	3433	5085	0	1770	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.85	0.85	0.85	0.92	0.88	0.92	0.47	0.88	0.92	0.53	0.73	0.92
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Adj. Flow (vph)	0	70	0	0	695	0	432	3206	0	37	2617	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	695	0	432	3206	0	37	2617	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA			NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	4			8								6
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	26.0	26.0		26.0	26.0		19.3	74.5		9.5	64.7	64.7
Total Split (%)	23.6%	23.6%		23.6%	23.6%		17.5%	67.7%		8.6%	58.8%	58.8%
Maximum Green (s)	21.5	21.5		21.5	21.5		14.8	70.0		5.0	60.2	60.2
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		21.5			21.5		14.8	73.8		5.0	60.2	
Actuated g/C Ratio		0.20			0.20		0.13	0.67		0.05	0.55	
v/c Ratio		0.19			1.01		0.94	0.94		0.46	0.94	
Control Delay		38.7			80.3		76.6	24.2		69.9	31.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		38.7			80.3		76.6	24.2		69.9	31.6	
LOS		D			F		E	C		E	C	
Approach Delay		38.7			80.3			30.4			32.2	
Approach LOS		D			F			C			C	

Intersection Summary

Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 36.1	Intersection LOS: D
Intersection Capacity Utilization 86.8%	ICU Level of Service E
Analysis Period (min) 15	

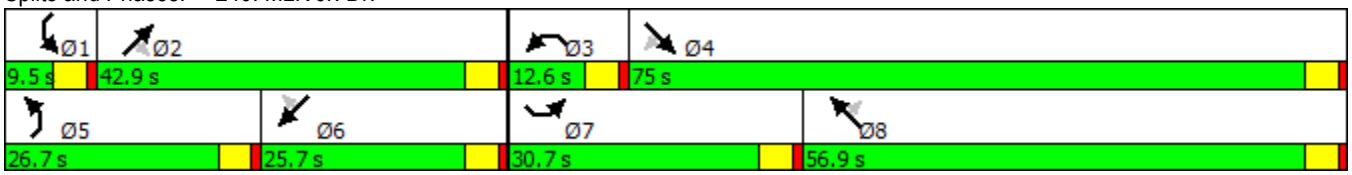
Splits and Phases: 170: Patton Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Future Volume (vph)	333	847	831	119	258	20	360	728	159	35	387	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	4359	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3505	1553	3183	3539	1538	3335	3223	1455	3072	4359	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			421			152			162			152
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.91	0.91	0.91	0.81	0.81	0.81	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	7%	3%	4%	10%	2%	5%	5%	12%	11%	14%	19%	5%
Adj. Flow (vph)	424	1080	1059	170	369	29	435	880	192	42	468	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	424	1080	1059	170	369	29	435	880	192	42	468	92
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	30.7	75.0	75.0	12.6	56.9	56.9	26.7	42.9	42.9	9.5	25.7	25.7
Total Split (%)	21.9%	53.6%	53.6%	9.0%	40.6%	40.6%	19.1%	30.6%	30.6%	6.8%	18.4%	18.4%
Maximum Green (s)	26.2	70.5	70.5	8.1	52.4	52.4	22.2	38.4	38.4	5.0	21.2	21.2
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	22.5	70.6	70.6	8.1	56.2	56.2	21.0	38.4	38.4	5.0	20.4	20.4
Actuated g/C Ratio	0.16	0.51	0.51	0.06	0.41	0.41	0.15	0.28	0.28	0.04	0.15	0.15
v/c Ratio	0.80	0.60	1.06	0.91	0.26	0.04	0.86	0.98	0.37	0.38	0.73	0.26
Control Delay	67.3	26.0	66.6	110.3	28.8	0.1	74.1	75.4	11.0	76.0	63.6	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.3	26.0	66.6	110.3	28.8	0.1	74.1	75.4	11.0	76.0	63.6	2.0
LOS	E	C	E	F	C	A	E	E	B	E	E	A
Approach Delay		49.6			51.7			66.8			55.1	
Approach LOS		D			D			E			E	

Intersection Summary	
Area Type: Other	
Cycle Length: 140	
Actuated Cycle Length: 138.1	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 55.4	Intersection LOS: E
Intersection Capacity Utilization 83.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 240: MLK Jr. Dr.



Synchro Report - Signal Improvements 2031 PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Future Volume (vph)	50	22	327	215	10	70	99	1084	115	114	1537	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		300	300		300
Storage Lanes	1		2	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1900	2760	1736	1429	1538	1641	3252	1442	1671	3252	1380
Flt Permitted	0.746			0.732			0.048			0.123		
Satd. Flow (perm)	1390	1900	2760	1337	1429	1538	83	3252	1442	216	3252	1380
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			158			117			128			82
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		458			669			1465			1699	
Travel Time (s)		10.4			15.2			33.3			38.6	
Peak Hour Factor	0.67	0.67	0.67	0.97	0.97	0.97	0.95	0.95	0.95	0.82	0.82	0.82
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	0%	3%	4%	33%	5%	10%	11%	12%	8%	11%	17%
Adj. Flow (vph)	87	38	566	257	12	84	121	1324	140	161	2174	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	38	566	257	12	84	121	1324	140	161	2174	11
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	11.1	26.1	26.1	11.0	26.0	26.0	10.9	82.5	82.5	20.4	92.0	92.0
Total Split (%)	7.9%	18.6%	18.6%	7.9%	18.6%	18.6%	7.8%	58.9%	58.9%	14.6%	65.7%	65.7%
Maximum Green (s)	6.6	21.6	21.6	6.5	21.5	21.5	6.4	78.0	78.0	15.9	87.5	87.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	28.2	21.6	21.6	28.0	21.5	21.5	89.6	83.2	83.2	97.1	87.5	87.5
Actuated g/C Ratio	0.20	0.15	0.15	0.20	0.15	0.15	0.64	0.59	0.59	0.69	0.62	0.62
v/c Ratio	0.29	0.13	1.01	0.90	0.05	0.25	0.98	0.68	0.15	0.62	1.07	0.01
Control Delay	47.0	52.5	82.9	85.7	51.5	5.1	107.9	22.2	3.2	19.3	68.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	52.5	82.9	85.7	51.5	5.1	107.9	22.2	3.2	19.3	68.2	0.0
LOS	D	D	F	F	D	A	F	C	A	B	E	A
Approach Delay		76.7			65.4			27.0			64.6	
Approach LOS		E			E			C			E	
90th %ile Green (s)	6.6	21.6	21.6	6.5	21.5	21.5	6.4	78.3	78.3	15.6	87.5	87.5
90th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
70th %ile Green (s)	6.6	21.6	21.6	6.5	21.5	21.5	6.4	82.5	82.5	11.4	87.5	87.5
70th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
50th %ile Green (s)	6.6	21.6	21.6	6.5	21.5	21.5	6.4	84.0	84.0	9.9	87.5	87.5
50th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
30th %ile Green (s)	6.6	21.6	21.6	6.5	21.5	21.5	6.4	85.0	85.0	8.9	87.5	87.5
30th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
10th %ile Green (s)	6.6	21.6	21.6	6.5	21.5	21.5	6.4	86.4	86.4	7.5	87.5	87.5
10th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Hold	Hold	Gap	Max	Max
Queue Length 50th (ft)	64	30	~227	212	9	0	63	408	4	44	~1151	0
Queue Length 95th (ft)	83	48	188	#395	30	21	#205	542	36	64	#1080	0
Internal Link Dist (ft)		378			589			1385			1619	
Turn Bay Length (ft)							300		300	300		300
Base Capacity (vph)	297	293	559	285	219	335	124	1933	909	317	2032	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.13	1.01	0.90	0.05	0.25	0.98	0.68	0.15	0.51	1.07	0.01

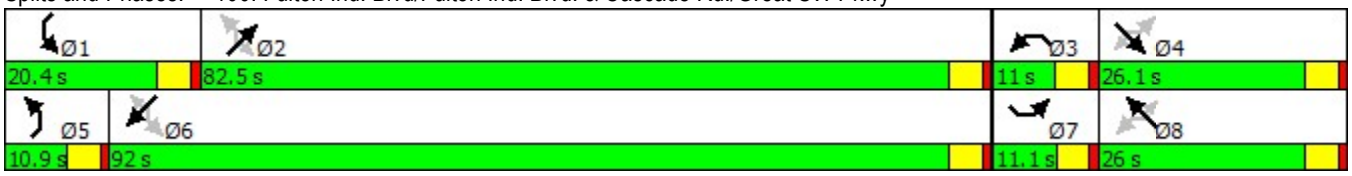
Intersection Summary

Area Type: Other	
Cycle Length: 140	
Actuated Cycle Length: 140	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 54.4	Intersection LOS: D
Intersection Capacity Utilization 87.6%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 140	
70th %ile Actuated Cycle: 140	
50th %ile Actuated Cycle: 140	
30th %ile Actuated Cycle: 140	
10th %ile Actuated Cycle: 140	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Fulton Ind. Blvd/Fulton Ind. Blvd. & Cascade Rd./Great SW Pkwy



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	30	0	0	250	219	64	1800	0	35	1108	0
Future Volume (vph)	30	30	0	0	250	219	64	1800	0	35	1108	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	300		0
Storage Lanes	0		0	0		0	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.97	0.91	1.00	1.00	0.91	1.00
Frt					0.930							
Flt Protected		0.976					0.950			0.950		
Satd. Flow (prot)	0	1545	0	0	2798	0	2918	4322	0	1504	4322	1583
Flt Permitted		0.430					0.950			0.950		
Satd. Flow (perm)	0	681	0	0	2798	0	2918	4322	0	1504	4322	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					116							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		749			928			950			975	
Travel Time (s)		17.0			21.1			21.6			22.2	
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.96	0.96	0.96	0.73	0.73	0.73
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Adj. Flow (vph)	44	44	0	0	322	282	77	2175	0	56	1761	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	88	0	0	604	0	77	2175	0	56	1761	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA			NA		Prot	NA		Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Detector Phase	4	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	22.5	22.5		22.5	22.5		9.5	48.0		9.5	48.0	48.0
Total Split (%)	28.1%	28.1%		28.1%	28.1%		11.9%	60.0%		11.9%	60.0%	60.0%
Maximum Green (s)	18.0	18.0		18.0	18.0		5.0	43.5		5.0	43.5	43.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0			0	0
Act Effct Green (s)		17.2			17.2		5.1	46.2		5.2	46.2	
Actuated g/C Ratio		0.22			0.22		0.06	0.58		0.06	0.58	
v/c Ratio		0.60			0.87		0.41	0.87		0.58	0.71	
Control Delay		47.1			39.2		43.2	20.8		61.7	14.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		47.1			39.2		43.2	20.8		61.7	14.9	
LOS		D			D		D	C		E	B	
Approach Delay		47.1			39.2			21.6			16.4	
Approach LOS		D			D			C			B	
90th %ile Green (s)	18.0	18.0		18.0	18.0		5.0	43.5		5.0	43.5	43.5
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	Coord
70th %ile Green (s)	18.0	18.0		18.0	18.0		5.0	43.5		5.0	43.5	43.5
70th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	Coord
50th %ile Green (s)	18.0	18.0		18.0	18.0		5.0	43.5		5.0	43.5	43.5
50th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
30th %ile Green (s)	18.0	18.0		18.0	18.0		5.0	43.5		5.0	43.5	43.5
30th %ile Term Code	Hold	Hold		Max	Max		Max	Coord		Max	Coord	Coord
10th %ile Green (s)	14.2	14.2		14.2	14.2		0.0	56.8		0.0	56.8	56.8
10th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Coord		Skip	Coord	Coord
Queue Length 50th (ft)		39			124		19	339		28	230	
Queue Length 95th (ft)		76			#212		41	#482		#57	201	
Internal Link Dist (ft)		669			848			870			895	
Turn Bay Length (ft)							200			300		
Base Capacity (vph)		153			719		186	2494		97	2494	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.58			0.84		0.41	0.87		0.58	0.71	

Intersection Summary

Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 22.3		Intersection LOS: C	
Intersection Capacity Utilization 71.9%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 170: Patton Dr.

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	130	479	490	251	612	55	513	514	161	80	1058	229
Future Volume (vph)	130	479	490	251	612	55	513	514	161	80	1058	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		400	350		0	300		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3242	3505	1553	3335	3539	1429	3303	3223	1509	3400	4759	1482
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3242	3505	1553	3335	3539	1429	3303	3223	1509	3400	4759	1482
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			308			164			199			170
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1101			1180			1498			1729	
Travel Time (s)		25.0			26.8			34.0			39.3	
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	0.94	0.94	0.94	0.88	0.88	0.88
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	8%	3%	4%	5%	2%	13%	6%	12%	7%	3%	9%	9%
Adj. Flow (vph)	171	631	646	339	825	74	633	634	199	105	1395	302
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	631	646	339	825	74	633	634	199	105	1395	302
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.8	28.0	28.0	14.8	32.0	32.0	23.0	45.7	45.7	11.5	34.2	34.2
Total Split (%)	10.8%	28.0%	28.0%	14.8%	32.0%	32.0%	23.0%	45.7%	45.7%	11.5%	34.2%	34.2%
Maximum Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	41.2	41.2	7.0	29.7	29.7
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	43.5	43.5	6.8	29.7	29.7
Actuated g/C Ratio	0.06	0.24	0.24	0.10	0.28	0.28	0.18	0.44	0.44	0.07	0.30	0.30
v/c Ratio	0.84	0.77	1.08	0.99	0.85	0.14	1.04	0.45	0.26	0.45	0.99	0.54
Control Delay	79.4	42.8	79.9	91.9	44.0	0.6	74.7	15.3	5.0	63.8	43.3	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	42.8	79.9	91.9	44.0	0.6	74.7	15.3	5.0	63.8	43.3	9.1
LOS	E	D	E	F	D	A	E	B	A	E	D	A
Approach Delay		63.7			54.5			39.6			38.8	
Approach LOS		E			D			D			D	
90th %ile Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	41.2	41.2	7.0	29.7	29.7
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	41.2	41.2	7.0	29.7	29.7
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	41.2	41.2	7.0	29.7	29.7
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	41.2	41.2	7.0	29.7	29.7
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	6.3	23.5	23.5	10.3	27.5	27.5	18.5	52.7	52.7	0.0	29.7	29.7
10th %ile Term Code	Max	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Skip	Coord	Coord
Queue Length 50th (ft)	56	198	~299	112	261	0	~228	172	39	32	326	75
Queue Length 95th (ft)	#111	255	#494	#190	317	0	m#334	m210	m72	m46	#415	m90
Internal Link Dist (ft)		1021			1100			1418			1649	
Turn Bay Length (ft)				250		400	350			300		
Base Capacity (vph)	204	823	600	343	973	511	611	1401	768	238	1413	559
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.77	1.08	0.99	0.85	0.14	1.04	0.45	0.26	0.44	0.99	0.54

Intersection Summary

Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 98 (98%), Referenced to phase 2:NET and 6:SWT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 48.3	Intersection LOS: D
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 240: MLK Jr. Dr.